

Preliminary Assessment Simclar Inc., Dayton



Division of Environmental Response and Revitalization May 2017



Preliminary Assessment Report

Former Simclar Facility

Dayton, Montgomery County, Ohio

U.S. EPA ID: OHN000506611 DERR ID: 557002905006 May 2017

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Site Assessment Manager U.S. EPA Region 5

PRELIMINARY ASSESSMENT (PA) REPORT

For

Former Simclar Facility
Dayton, Montgomery County, Ohio
U.S. EPA ID OHN000506611
Ohio EPA ID 557002905006

OHIO ENVIRONMENTAL PROTECTION AGENCY
Division of Environmental Response and Revitalization
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TABLE OF CONTENTS

Section	<u>on</u>	<u>Page</u>
1.0	EXECUTIVE SUMMARY	1
2.0	SITE BACKGROUND	3
	 2.1 Site Description 2.2 Site History 2.3 CERCLA History 2.4 Other Cleanup Authorities 2.4.1 RCRA 2.4.2 Other Investigations/State Enforcement 2.5 Site Geology & Hydrology 2.5.1 Geology 2.5.2 Soils 2.5.3 Topography 	3 3 4 4 4 5 7 7 7
	2.5.4 Hydrogeology 2.6 Land use and Demographic Information	8 8
3.0	MIGRATION PATHWAYS	9
	3.1 Ground Water Pathway3.2 Surface Water Pathway3.3 Soil Exposure Pathway3.4 Air Pathway	9 9 10 10
4.0	SUMMARY	11
5.0	REFERENCES	12

APPENDICES

Figures	Appendix A
Tables	Appendix B
Well Logs	Appendix C
Target Distance Maps and Tables	Appendix D

LIST OF FIGURES

<u>Figure</u>

- 1 Site Location Map (Turn-Key Environmental, 2012)
- 2 Phase II Investigation Sample Location Map (Bowser-Morner, 1994)
- 3 2012 Phase II Expanded Site Assessment Sample Location Map
- Phase II Voluntary Action Program Sample Location and Ground Water Results Map (Burgess & Niple, 2015)
- 5 Phase II Investigation Ground Water Flow Map (Bowser-Morner, 1994)
- 6 2012 SIFU Ground Water Flow Map
- 7 2015 VAP Phase II Ground Water Flow Map (Burgess & Niple, 2015)
- 8 Former Simclar Property, Dayton: Shallow Ground Water Flow, Measured, February 14, 2017
- 9 Engineering Evaluation/Cost Analysis for the Behr Dayton Thermal Products Plant Shallow Potentiometric Surface Map (AECOM, 2014)

LIST OF TABLES

Table

- 1 1994 Bowser-Morner Ground Water and Soil Results
- 2 2012 Phase II Expanded Site Assessment Ground Water and Soil Results

1.0 EXECUTIVE SUMMARY

The Ohio Environmental Protection Agency (Ohio EPA) Division of Environmental Response & Revitalization (DERR) entered into a cooperative agreement with the United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Preliminary Assessment (PA) of the Former Simclar Facility located in Montgomery County, Ohio.

The purpose of this report is to evaluate site history and summarize available data to determine if further action and sampling is necessary.

A Pre-CERCLA Screening (PCS) report was completed by Ohio EPA under the name of *Former Simclar Facility* and approved by U.S. EPA on October 3, 2016. The site has also been referred to as Lytton, Inc., Labinal Components and Systems, Globe Motors, TRW, Inc., and Globe Industries.

The Former Simclar Facility (Property) is situated on one parcel of land totaling 5.5472 acres and located at 1784 Stanley Avenue, Dayton, Montgomery County, Ohio (the Property). The Property overlies the Great Miami Buried Valley Sole-Source Aquifer and is located approximately 0.5 miles from the city of Dayton's Miami Wellfield well-head protection area and within 1.5 miles of the Mad River production wellfield. Together the two wellfields serve approximately 400,000 people.

Due to historic operations at the former facility, the aquifer beneath the Property is contaminated above maximum contaminant level (MCL) drinking water standards for the following chemicals of concern (COCs): tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-trichloroethane (1,1,1-TCA). Concentrations of COCs in ground water beneath the Property indicate that there is an ongoing source leaching to the aquifer. Heavy metals and volatile organic compounds (VOCs) may remain in property soils and could pose a direct contact threat to commercial/industrial and construction/excavation workers. The possibility exists for the ground water plume to migrate off-property and create a vapor intrusion threat at nearby occupied structures.

U.S. EPA and Ohio EPA became aware of ground water and soil contamination at the Property during sampling for the Behr Dayton Thermal Systems VOC Plume Superfund site (Behr) that is hydraulically side-gradient to the Property. The Behr Dayton Thermal Systems VOC Plume Superfund Site is located a half mile east of the Property. In 2007, as part of the remedial investigation for Behr, ground water in the area wells was sampled. As part of this effort three existing wells on the Property were sampled. The following COCs were detected above their MCL: 1,1,1-TCA was detected at a concentration of 710 micrograms per liter (μ g/L) (federal MCL is 200 μ g/L), PCE was detected at a concentration of 22 μ g/L and TCE was detected at a concentration of 520 μ g/L. The MCL for PCE and TCE is 5 μ g/L.

In December 2012, Ohio EPA's Site Investigation Field Unit (SIFU) collected grab ground water samples at the Property. The highest ground water detections were 302 μ g/L 1,1,1-TCA, 12.8 μ g/L PCE, and 237 μ g/L TCE.

A previous property owner conducted an independent site investigation in 2014-2015. Ground water samples had concentrations of PCE and TCE above their MCLs. Two samples contained PCE at 5.1 μ g/L, while numerous samples contained TCE. TCE concentrations ranged from 5.7 to 293 μ g/L.

Since 2013 Ohio EPA has been working with two identified potentially responsible parties (PRPs) to negotiate orders requiring them to investigate the site and perform any necessary cleanup; however, the PRPs have not been willing to sign an order. Consequently, in 2014 the case was referred to the Ohio Attorney General's Office. Negotiations are ongoing.

2.0 SITE BACKGROUND

2.1 Site Description

The Former Simclar Facility is situated on one parcel of land totaling 5.5472 acres and located at 1784 Stanley Avenue, Dayton, Montgomery County, Ohio. The latitude and longitudinal coordinates for the Property are 39.7872 latitude and -84.1853 longitude. The Property is occupied by a 77,792 square foot manufacturing plant and a 320 square foot storage building. The Property is in an industrial area and is bounded to the north by Stanley Avenue, to the west by a vacant lot, to the east by Interstate 75, and to the south by a vacant lot. The Property overlies the Great Miami Buried Valley Sole-Source Aguifer and is located approximately 0.5 miles from the city of Dayton's Miami Wellfield well-head protection area. The Property is hydraulically side-gradient to Behr, a Superfund site, and hydraulically up-gradient of the Resource Conservation and Recovery Act (RCRA) corrective action site, EPS. The current property owner is Good Samaritan Homes. Good Samaritan Homes employs underprivileged and handicapped individuals in the Dayton area for light assembly of pre-made goods. The Property may potentially overlie a hydraulic ground water flow divide area as two historic investigations done by different parties have shown ground water flow in varying directions under the Property. Figure 1 provides an aerial view of the Property.

2.2 Site History

Review of historical records and past reports completed for the Property confirm that the Property was purchased by Globe Industries in 1951. The Property was developed from 1952 to 1965 with a hazardous waste storage shed being built in 1961. In 1966, the property was purchased by TRW (Globe Industries, a Division of TRW). Labinal Components & Systems purchased the Property in 1987 and closed down in 1991. In 1995, Lytton, Inc. purchased the Property and Stanley Avenue Properties purchased the Property in 1997 with Lytton, Inc. leasing. In 2001, Simclar, Inc. began leasing the Property and purchased it in 2004 (Burgess & Niple, 2014).

Historically, the Property was used as a manufacturing facility for electric motors until 1991. It was then used for manufacturing printed circuit boards until Simclar ceased operations in 2012. Currently, the property is owned by Good Samaritan Homes and is used for light commercial/industrial processes.

The property changed ownership multiple times: Globe Industries (1951-1967), TRW Inc. (1967-1987), Labinal Components and Systems, AKA Globe Motors (1987-1995), Lytton Incorporated (1995-1996), Stanley Avenue Properties Ltd. (1996-2004), Simclar, Inc. (2004-2014), First Priority Tax Solutions (2014-2016), and Good Samaritan Homes (2016-present).

Globe Industries, TRW Inc., Labinal Components and Systems/Globe Motors

manufactured electric motors at the Property. During this historic manufacturing, the companies generated hazardous waste streams including used PCE, TCE, and 1,1,1-TCA. Heavy metals, such as chromium and lead, were also used in the motor manufacturing process. Lead was also later used in the manufacture of circuit boards when the property was owned and operated by Lytton Incorporated, Stanley Avenue Properties Ltd., and Simclar, Inc. Suspected source areas for VOCs include the former hazardous waste storage shed and pad, interior locations of metal plating and spray booths, and a former underground storage tank (UST) previously located near the northwestern corner of the building, in the parking lot.

2.3 CERCLA History

Ohio EPA generated a Pre-CERCLA Screening Assessment Checklist for the property; the checklist was approved by USEPA on October 3, 2016.

The PA was conducted in November 2016 and determined the following: the results of the 2012 Phase II assessment, conducted by Ohio EPA, demonstrate that soil and ground water at the Property are contaminated above U.S. EPA's regional screening levels (RSLs) for soil leaching to ground water and MCLs for ground water. Historic operations for manufacturing electric motors included the use of the VOCs PCE, TCE, and 1,1,1-TCA as well as heavy metals. Spent solvents were housed outside on the storage pad and in the chemical storage shed located on the eastern side of the building. Sampling, independently conducted in 2014-2015 by a previous site owner, confirmed the continued presence of PCE and TCE contamination in ground water at the Property above the chemical's MCLs.

The Property is within a half mile west of the Behr Dayton Thermal Systems VOC Plume Superfund Site. Based on ground water flow patterns and VOC concentrations, the Simclar Property and the Behr Site are two, separate releases. The Simclar Property has been ruled out as a source for the Behr Site.

2.4 Other Cleanup Authorities

2.4.1 RCRA

The Ohio EPA hazardous waste program inspected the Property two separate times during its operational history – April 5, 1986 and June 22, 1988. Only minor violations were discovered during the inspections. From 1961-1987 and 1987-1991 both TRW Inc. and Globe Motors, respectively, were large quantity generators of hazardous wastes at the Property and operated under the hazardous waste generator number, OHD041066325. Based on the January 1994 document, *Waste Characterization – Plating Area, Soil Sampling/Analysis – Pad Area, and Tank Cleaning/Disposal*, prepared by Environmental Assessment Services, Inc., on behalf of Globe Motors, it appears that Globe Motors stored their plating wastes, which were characteristic hazardous wastes,

for greater than 90-days. This document reveals that Globe Motors had shut down operations at the Property in 1991 and had left their plating wastes on site until 1994. Because Globe Motors was a large quantity generator of hazardous waste, and they had stored their hazardous waste for longer than 90-days, the facility was, in essence, acting as an unpermitted treatment, storage and disposal (TSD) facility. However, Globe Motors was not cited for this violation. The RCRA program at Ohio EPA has been consulted regarding whether there are any RCRA issues at this facility; there are currently no RCRA issues. Based on this information it is appropriate for the site to be addressed under CERCLA authority. Since 2013, the Ohio EPA Remedial Response program has been working with two PRPs to sign an order to address contamination at the site.

2.4.2 Other Investigations/State Enforcement

Historically, previous property owners conducted property assessments in the 1980s and 1990s. Ohio EPA conducted a property assessment in 2012/2013.

In 1994, a Phase II property assessment was conducted by Bowser-Morner and Environmental Assessment Services, Inc. to categorize waste being generated on site, to remove three above ground storage tanks (AST), and to investigate suspected releases of chemicals on site. Three monitoring wells and four soil borings were installed in an area that formerly stored bulk chemicals, drums of hazardous waste, solvents, plating chemicals, and three 1,000-gallon ASTs containing waste oil, waste coolants, and 1,1,1-TCA. **Figure 2** is from the 1994 assessment report and depicts where samples were located. Results indicated that cyanide and solvents had leaked through the floor of the storage area and that PCE, TCE, and toluene had been spilled north of the storage area. Ground water and soil sample results are provided in Table 1. The Phase II property assessment concluded that, though such chemicals were present above MCLs in the ground water on site, they posed no immediate health risk (Bowser-Morner, 1994).

U.S. EPA and Ohio EPA sampled three existing wells on the Property in 2007 as part of an area-wide ground water assessment for the Behr site. 1,1,1-TCA, PCE, and TCE were detected at the following concentrations, 710 µg/L, 22 µg/L, and 520 µg/L, respectively.

On September 10, 2012, as requested and commissioned by Ohio EPA, a Phase I property assessment was submitted by Turn-Key Environmental Consultants to the Ohio EPA. Turn-Key Environmental Consultants concluded that the Property poses a potential environmental threat due to the historic use of the Property for manufacturing. In addition, Turn-Key Environmental Consultants had concerns related to the chemical storage and disposal of the chemicals, 1,1,1-TCA, PCE, and TCE, and heavy metals.

The Phase I property assessment concluded that further investigation was needed to determine the source and extent of contamination, whether additional areas of

contamination exist, and whether contamination is migrating off-site.

On December 3, 2012, a Phase II property assessment was conducted by Ohio EPA SIFU to mimic the 1994 Phase II property assessment by Bowser-Morner and to evaluate subsurface conditions. Soil samples targeted the bulk chemical storage shed. The goals of the SIFU Phase II included: verifying the release of VOCs to soil and ground water; locating contaminated soils that are acting as a source of VOCs to ground water; and determining the direction of ground water flow. **Figure 3** shows the location of samples collected by SIFU in 2012.

Results of the SIFU Phase II investigation indicate that there is a source of VOCs on the property. The highest concentrations of VOCs in soil included TCE and 1,1,1-TCA in soil boring (SB) 3 at 63.5 milligrams per kilogram (mg/kg) and 43.5 mg/kg, respectively, and PCE in SB4 at 4.77 mg/kg. The highest concentrations of VOCs in ground water were all above their respective MCLs and occurred in monitoring well 3: PCE was detected at 12.8 μ g/L, TCE at 237 μ g/L, and TCA at 302 μ g/L. Ground water and soil sample results are summarized in Table 2. Ground water flow was determined to be to the south.

On September 9, 2013, Ohio EPA sent an invitation to negotiate final findings and orders to two PRPs, Globe Motors and Northrop Grumman, for a source control interim action, plume delineation and remediation, and areas of concern investigation and remediation. On May 29, 2014, after numerous attempts to negotiate with the PRPs, the orders were referred to the Ohio Attorney General's Office to initiate legal action, to pursue injunctive relief and to recover costs incurred by Ohio EPA in responding to conditions at the Property. Negotiations are on-going.

In June 2014 and July 2015, the previous owner, First Priority Tax Solutions, commissioned Burgess & Niple, Inc., to develop a Voluntary Action Program (VAP) Phase I and Phase II property assessment. Ohio EPA has not conducted a quality assurance/quality control review of the data and did not perform a technical review of the document text and models. The Phase I identified 10 areas of concern that required environmental sampling. The Phase II collected shallow soil samples, ground water grab samples, monitoring well samples, and indoor air samples. Figure 4 shows sample locations as provided in the 2015 VAP Phase II report and summarizes ground water detections. The ground water flow direction was determined to vary across the Property. In some areas ground water was flowing to the north/north-east and in other areas it was flowing toward the west. Shallow soil samples, collected from 0-2, 2-4, and from a few feet to 10 feet below ground surface (bgs), were compared to VAP generic VAP direct contact standards for commercial/industrial direct-contact standards. workers were exceeded at three locations across the property for benzo(a)pyrene, lead, and total petroleum hydrocarbons. Grab ground water samples were collected from a number of areas across the site and were initially screened for VOCs, metals, and polynuclear aromatic hydrocarbons (PAHs). TCE was detected in a number of grab ground water samples ranging from 6.8-61.1 µg/L. Based on results of the grab ground

water sampling, permanent monitoring wells were installed and, along with existing monitoring wells, sampled. Drinking water standards were exceeded for VOCs, metals, and PAHs. Specifically, TCE was detected above the MCL ranging from 5.7-293 μ g/L at various locations throughout the Property. Currently, ground water is not used for potable purposes on Property.

2.5 Site Geology & Hydrology

2.5.1 Geology

According to the Physiographic Regions of Ohio map from the Ohio Department of Natural Resources (ODNR), the Property is located in the Till Plains and the Southern Ohio Loamy Till Plain. These physiographic regions are characterized by a surface of loamy till and end and recessional moraines, commonly associated with boulder belts, between relatively flat lying ground moraines. This area is cut deeply by steep-valleyed large streams filled with outwash and alternates between broad and narrow flood plains (Burgess & Niple, 2014).

The glacial outwash deposits beneath the area consist primarily of well sorted, stratified deposits of sand, gravel, cobbles, and boulders. Bedrock consists of calcareous shales and thin, bedded limestones of the upper Ordovician Richmond group (Turn-Key Environmental, 2012).

2.5.2 Soils

Specific soils data obtained from subsurface investigations conducted on the Property indicate the presence of construction fill or silty clay in the top few feet, then silty river alluvium, followed by more than twelve feet of sand/gravel (Turn-Key Environmental, 2012).

2.5.3 Topography

According to the United States Geological Survey 7.5-Minute Topographic Map of the North Dayton area, the elevation for the property is approximately 744-745 feet above mean sea level. Surrounding properties are between 738 and 779 feet above mean sea level (Burgess & Niple, 2014, and Turn-Key Environmental, 2012).

The southern portion of the Property is higher in elevation than the remainder of the Property and surrounding properties. The parking lot on the east side of the building slants toward the building to the west, and the remainder of the Property is generally flat. Surface water flows into storm drains on the Property and the adjacent street (Turn-Key Environmental, 2012).

2.5.4 Hydrogeology

The ODNR, Division of Water, Groundwater Resource Map for Montgomery County indicates the Property is in an area where well yields of more than 500 to 1,000 gallons per minute (gpm) may be developed. Permeable sand and gravel deposits beneath the floodplain of the Mad and Miami Rivers identify this area as having a "high yield." Production wells in the area are identified between 110 and 175 feet bgs in depth and yielding 600 to 1,200 gpm. Most production wells are set in sand and gravel. Some bedrock was found at 110 feet bgs (Burgess & Niple, 2014). From historical investigations, depth to water at the Property ranges from 12 to 14.5 feet bgs.

2.6 Land Use and Demographic Information

The area immediately surrounding the subject property is occupied by the following: Stanley Avenue to the north with a trucking company and undeveloped land (northeast) beyond; a vacant lot to the east with a vacant industrial building beyond; undeveloped land to the south; and Interstate 75 to the east.

The Property consists of one 77,792 square feet (sf) former manufacturing plant, which, according to visual inspections of the Property and previous assessments, consists of offices, a former machine shop, a former production area, a former automation room, loading docks and chemical storage, and a former solder wave room. According to previous assessments, the northern portion of the building was constructed in 1952 with additions built from 1955 to 1965. The former hazardous waste storage shed was constructed in 1961 (Burgess & Niple, 2012).

The city of Dayton's Miami Wellfield well-head protection area lies less than 0.5 miles northeast of the Property. The closest Miami Wellfield production well lies less than 1-mile from the Property. The city of Dayton's Mad River Wellfield and closest production well are located 1.5-miles to the southeast of the Property. Together the Miami and Mad River Wellfields serve approximately 400,000 people.

According to the 2010 census, 5,691 people live within a one-mile radius of the Property.

Complete detailed demographic information is provided in the Target Distance Maps and Tables in **Appendix D**.

3.0 MIGRATION PATHWAYS

3.1 Ground Water Pathway

Ground water is the primary pathway of concern due to known VOC ground water contamination. In 2012, the highest concentrations detected in ground water monitoring wells on the Property were 302 μ g/L of 1,1,1-TCA, 12.8 μ g/L of PCE, and 237 μ g/L of TCE. There is the potential for soils on the Property to be contaminated above leaching standards. These soils may be continually leaching VOCs to ground water above the MCL.

Public drinking water systems that use ground water and well-head protection areas are within the four-mile target distance limit. The majority of the surrounding population obtains their drinking water from the city of Dayton. Dayton operates the Miami Wellfield and the Mad River Wellfield. These two wellfields have 102 active wells serving approximately 400,000 people. There are 36 production wells in the Miami Wellfield. Both wellfields draw water from the Great Miami River Buried Aquifer System, which has been designated as a sole-source aguifer. Ground water flow under the Property has shown to vary over time. Numerous ground water level measuring events have been performed using wells on the Property. Water level measuring events have occurred in 1994, 2012, 2015 and 2017. The hydraulic gradient on the Property is fairly level. The most recent elevation event measured differences in hydraulic heads of 0.1 feet between monitoring wells. On Property, it appears that ground water flows generally to the southeast, based on investigations performed in 1994, 2012 and 2017. However, elevations collected in 2015 indicated ground water may also at times flow west/northwest and there may be a ground water divide on the Property where ground water flow shifts from westerly flow to northern flow. See Figures 5, 6, and 7. times, there is the potential for contaminated ground water to be flowing northerly, towards the Miami Wellfield.

Regionally, ground water flow is to the southeast, based on data collected for the nearby Behr Dayton Thermal VOC Plume Superfund Site. A ground water divide has also been measured generally extending to the east along Stanley Avenue, which is consistent with ground water elevations measured in 2015 in on Property wells. For a pictorial description, please see **Appendix A, Figure 8** (AECOM, 2014).

3.2 Surface Water Pathway

No surface water bodies exist on the Property, although the Great Miami River is located less than a half mile northwest of the Property. A storm water sewer is located on the property. As such, there is the potential for overland flow from the site to the storm sewer. There are no known releases to storm sewers, although historically, the hazardous waste storage area drained to the storm sewers on the eastern side of the Property.

There are 33.8 miles of river frontage and three different types of wetlands within the 15-mile target distance limit. The four wetland types are: riverine, freshwater forested/shrub wetland, and freshwater/emergent wetland. There is one threatened species located 0.968 miles from the site, the *Uniomerus tetralasmus*, commonly known as the Pondhorn, a freshwater mollusk.

3.3 Soil Exposure Pathway

There is a potentially complete soil exposure pathway at the Property due to contaminated soils. On-site workers and potential construction/excavation workers could be exposed through incidental ingestion and dermal contact with contaminated soils. Due to the VOC contamination present in the soil, vapor migration into occupied structures both on and off-property, is also a potential threat. On-site workers could also be exposed to contaminated vapors during excavations and through inhalation of fugitive dust. Historical use of the property includes use of heavy metals, specifically chromium and lead, and chlorinated solvents, including PCE, TCE, and 1,1,1-TCA.

3.4 Air Pathway

The air pathway is not a major pathway of concern.

May 2017 Former Simclar Facility 11

4.0 Summary

The ground water and soil contamination on the Property are contributing to an ongoing source of VOCs to the sole-source aquifer and resulting in contamination to the aquifer above MCLs. Although ground water is not used for potable use at the Property, it has the potential to impact the City of Dayton's municipal supply wells, which serve approximately 400,000 people.

The on and off-property vapor intrusion pathway is of concern as sample results indicate that the ground water contamination may be migrating off-property.

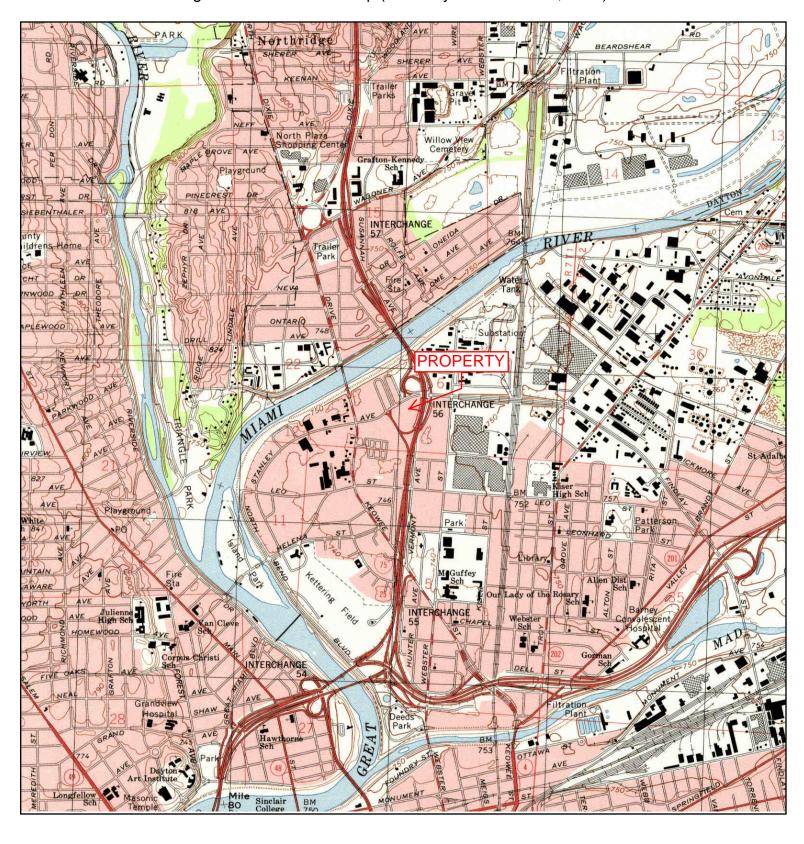
There is the potential for property-wide soils to pose a direct contact threat to commercial/industrial and construction/excavation workers.

5.0 REFERENCES

- Report on Phase II Investigation of Former Globe Motors Site, Bowser-Morner, May 1994
- Physiographic Regions of Ohio, Ohio Department of Natural Resources, Division of Geological Survey, map, Brockman, C. Scott, 1998
- VAP Phase I Property Assessment, Burges & Niple, June 2014
- Interim Phase II Property Assessment Performed Following Ohio EPA Voluntary Action Program Protocol, Burgess & Niple, July 2015
- Phase I Environmental Site Assessment of Simclar, Inc., Turn-Key Environmental Consultants, Inc., September 2012
- Engineering Evaluation/Cost Analysis for the Behr Dayton Thermal Products Plant, Final, AECOM, November 2014
- Site Investigation Field Unit Field Report, Ohio EPA, April 2017

Appendix AFigures

Figure 1: Site Location Map (Turn-Key Environmental, 2012)





TARGET QUAD

NAME: DAYTON NORTH

MAP YEAR: 1996

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Simclar

ADDRESS: 1784 Stanley Avenue

Dayton, OH 45404

LAT/LONG: 39.787 / -84.1853

CLIENT: Turn-Key Env. Consultants, Inc

CONTACT: Heather Wendel INQUIRY#: 3352072.4 RESEARCH DATE: 06/25/2012

Figure 2: Phase II Investigation Sample Location Map (Bowser-Morner, 1994)

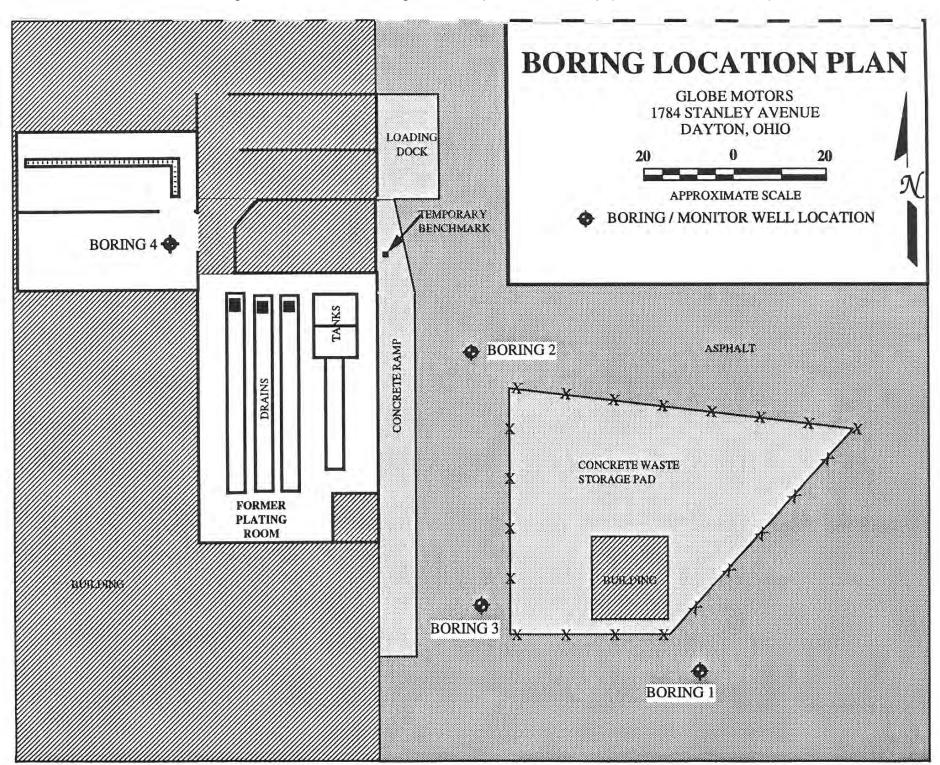


Figure 3: 2012 Phase II Expanded Site Assessment Sample Location Map



Figure 4: Phase II Voluntary Action Program Sample Location and Ground Water Results Map (Burgess & Niple, 2015)

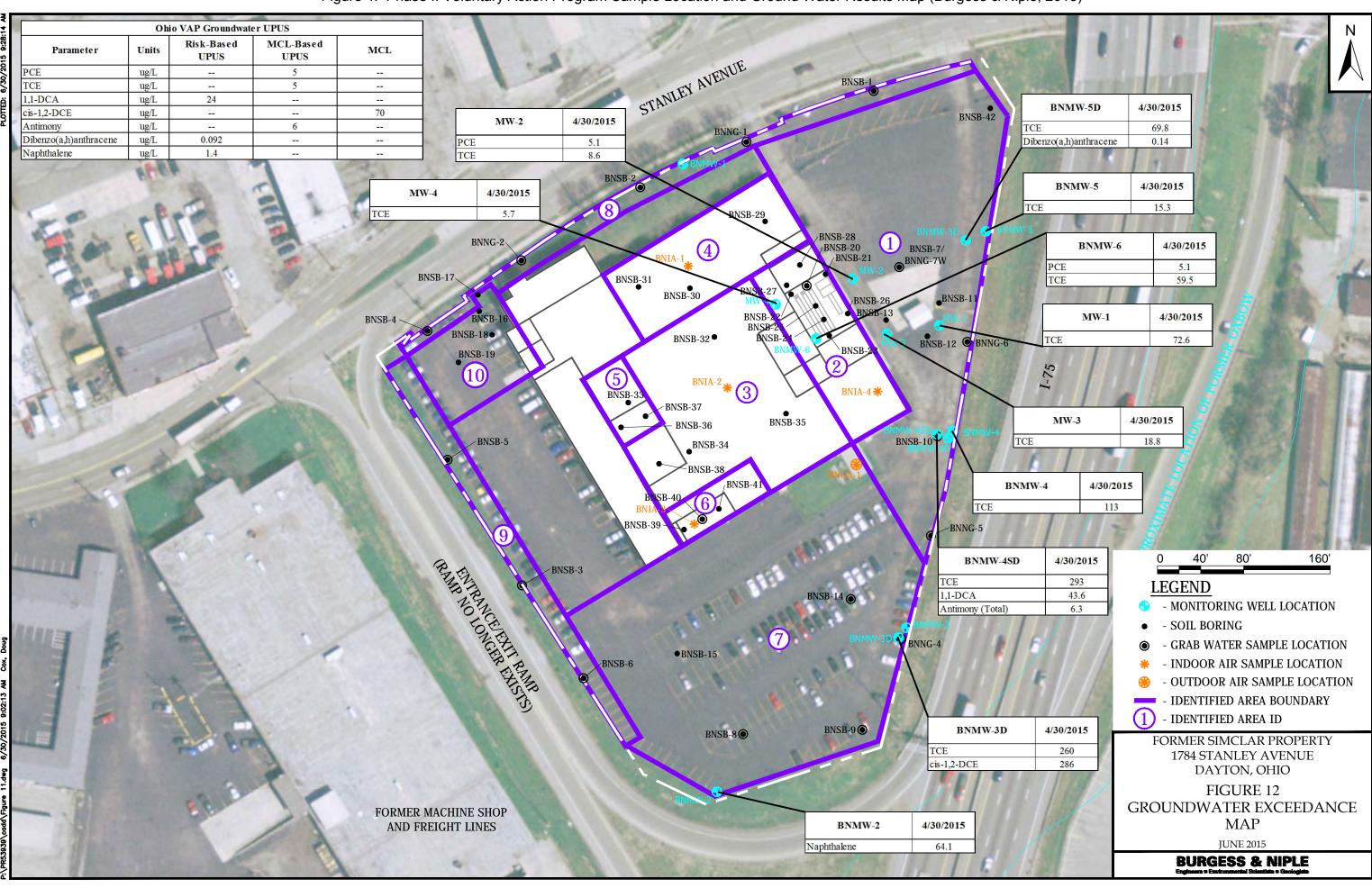
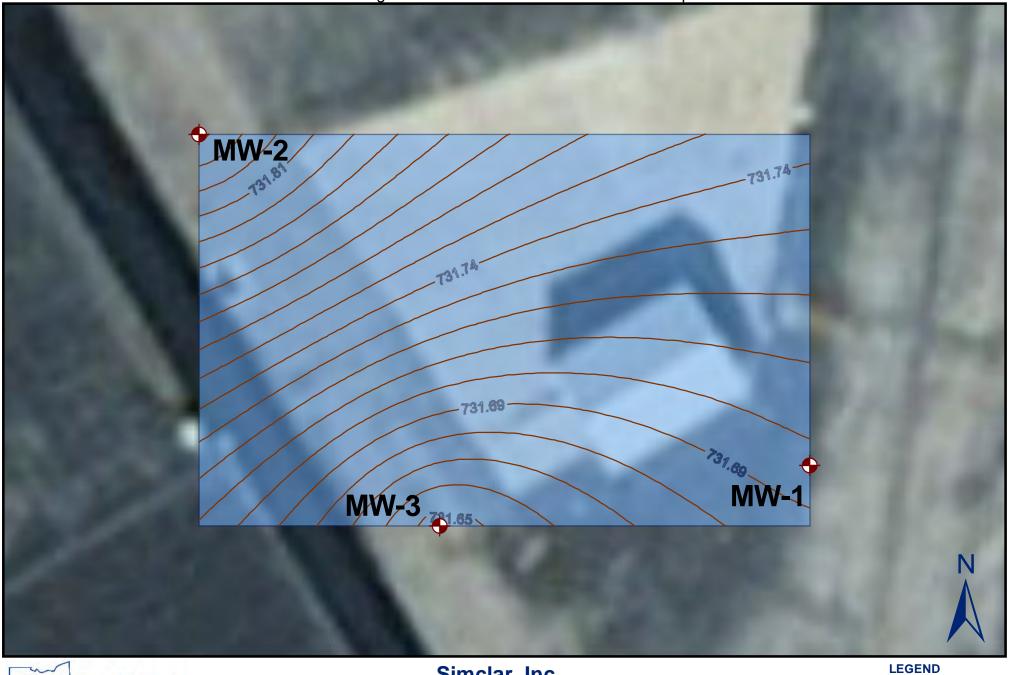


Figure 5: Phase II Investigation Ground Water Flow Map (Bowser-Morner, 1994) **GROUNDWATER ELEVATION MAP GLOBE MOTORS** 1784 STANLEY AVENUE DAYTON, OHIO 20 20 86.6 APPROXIMATE SCALE TEMP RARY **BORING 4** BENC MARK GROUNDWATER ELEVATION CONTOUR **GROUNDWATER FLOW DIRECTION** 99.69 (86.49) **=86.4** DRAINS TA **BORING 2 ASPHALT** 97.43 (86.29) FORMER PLATING ROOM 86.2 **CONCRETE WASTE** STORAGE PAD BUILDING 86.0 BUILDING **BORING 3** 97.93 (85.85) **BORING 1** 99.88 (85.64)

Figure 6: 2012 SIFU Ground Water Flow Map





Simclar, Inc. Phase II ESA Groundwater Contours





Figure 7: 2015 VAP Phase II Ground Water Flow Map (Burgess & Niple, 2015)

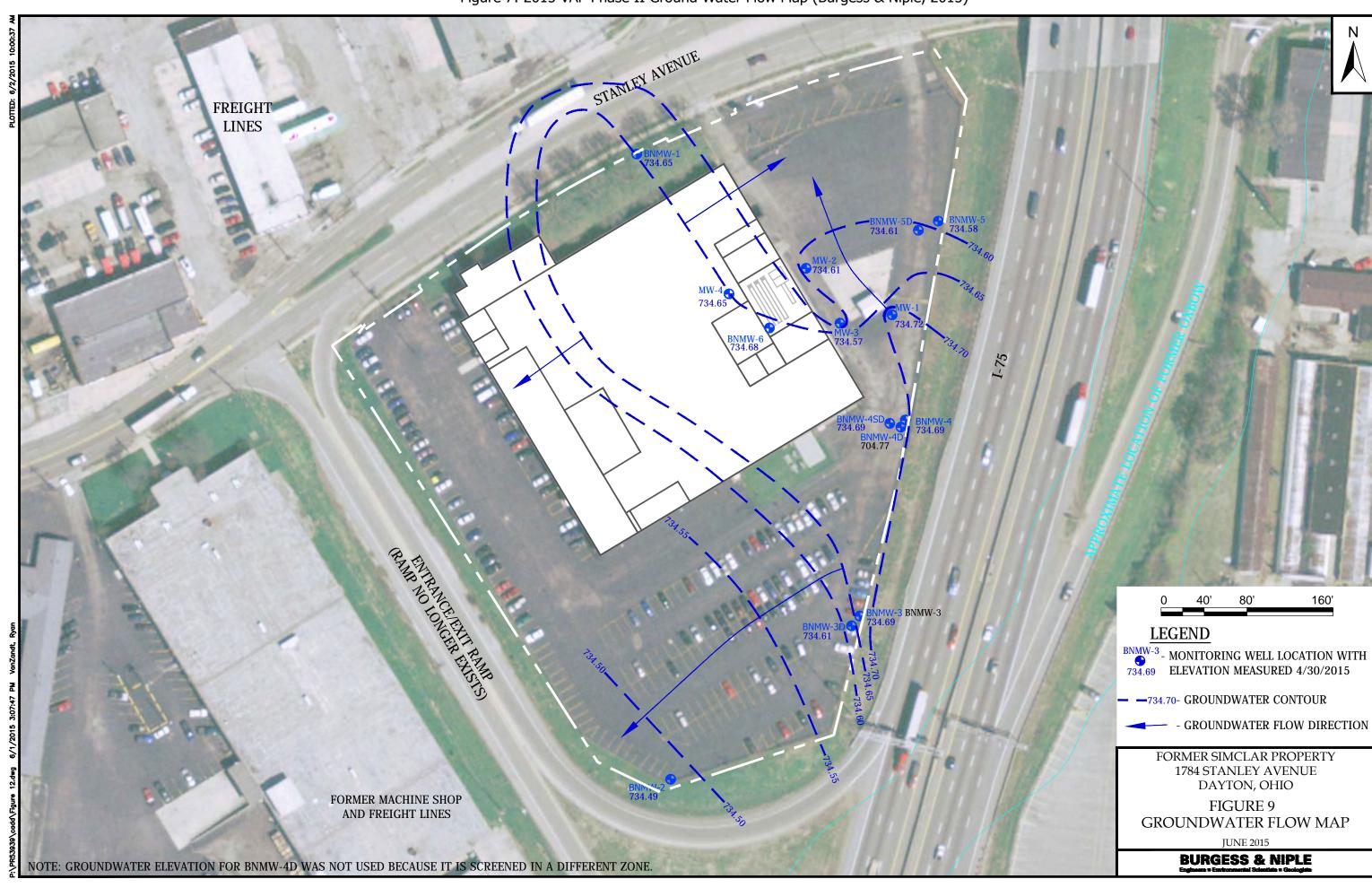
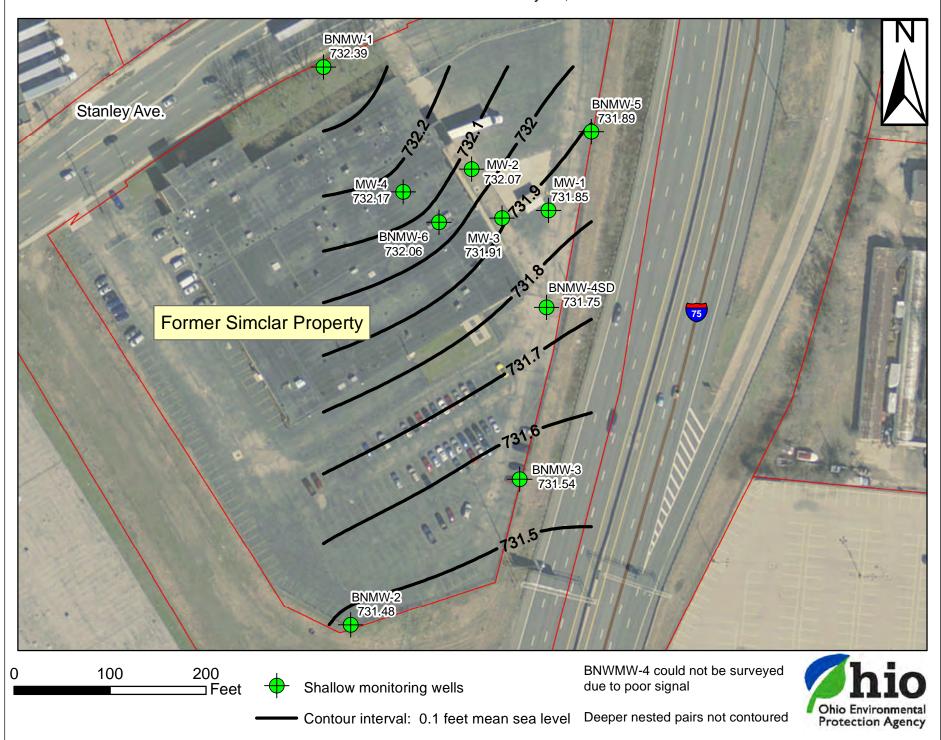
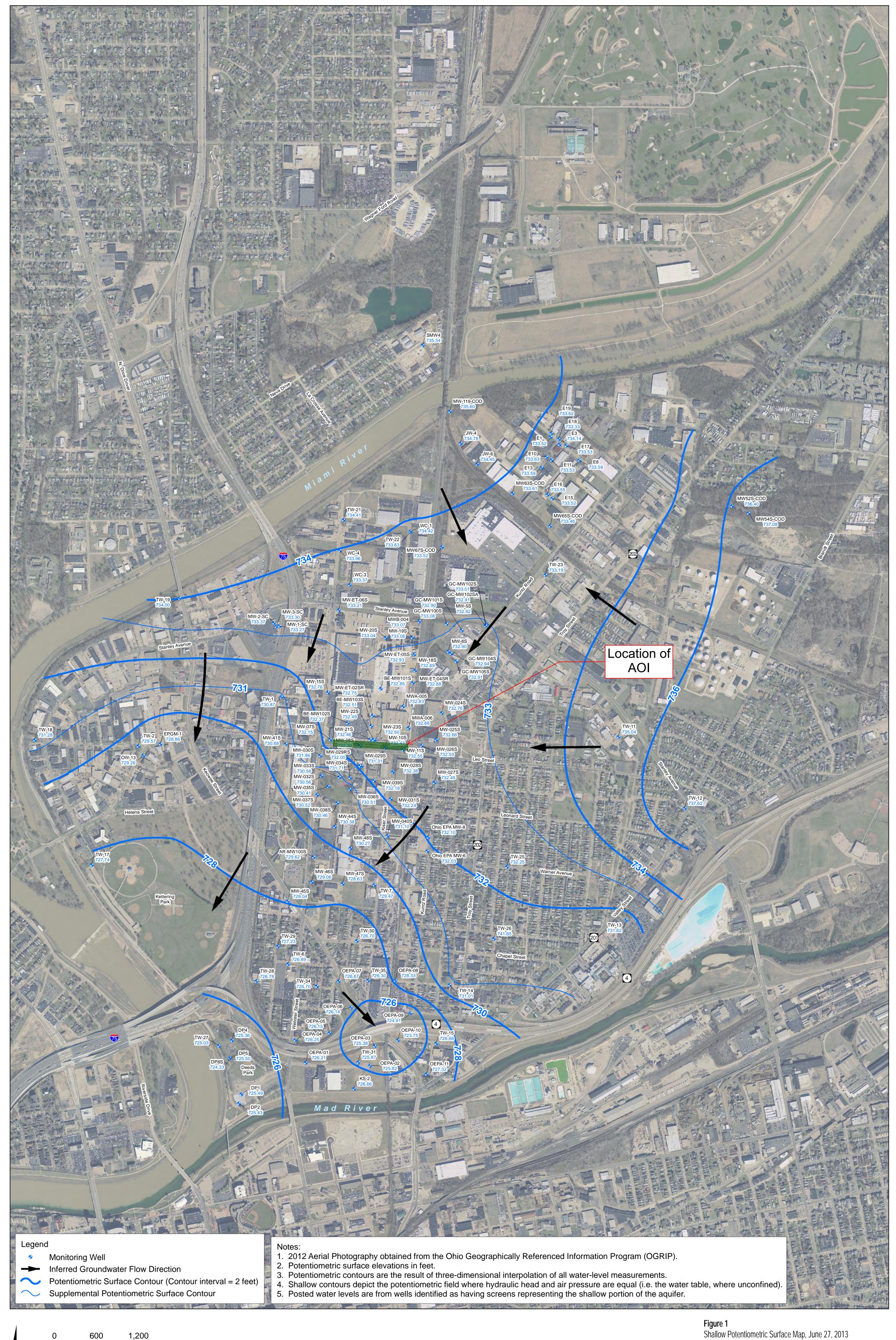


Figure 8: Former Simclar Property, Dayton: Shallow Ground Water Flow, Measured February 14, 2017





Behr Dayton Thermal System VOC Plume Site Dayton, Ohio

Appendix B

Tables

Ground Water Sample Detections: May 1994

Soil Sample Detections: May 1994

Sample ID	Detected Chemical	Concentration (μg/L)
MW-1		
	1,1,1-Trichloroethane	850
	1,1,2-Trichloroethane	5.10
	1,1-Dichloroethane	330
	Tetrachloroethene	12.0
	Trichloroethene	680
	1,1-Dichloroethene	28.0
	Barium	110
	Selenium	3.00
MW-2		
	1,1,1-Trichloroethane	210
	1,1-Dichloroethane	75.0
	Tetrachloroethene	22.0
	Trichloroethene	170
	Arsenic	4.00
	Barium	140
	Selenium	2.00
MW-3		
	1,1,1-Trichloroethane	1000
	1,1-Dichloroethane	170
	Trichloroethene	750
	1,1-Dichloroethene	33.0
	trans-1,2-Dichloroethene	6.80
	Barium	110
MW-4		
	1,1,1-Trichloroethane	77.0
	1,1-Dichloroethane	26.0
	Trichloroethene	46.0
	Arsenic	2.00
	Barium	190

	Concentration		
Cample ID	Depth (feet)	Detected Chemical	Concentration (µg/kg)
Sample ID B1-7A	13-15'	Detected Chemical	(μg/ κg)
51 ///	15 15	1,1,1-Trichloroethane	51
		Trichloroethene	80
		Arsenic	2200
		Cadmium Chromium	130 18000
		Lead	2400
		Barium	16000
B1-10A	19-21'		
		1,1,1-Trichloroethane	850
		1,1-Dichloroethane Tetrachloroethene	210 110
		Trichloroethene	2700
		1,1-Dichloroethene	19
		Arsenic	1300
		Cadmium	170
		Chromium	23000
		Lead Barium	2900 13000
B2-1A	1-3'	Darium	13000
		1,1,1-Trichloroethane	11
		1,1-Dichloroethane	30
		1,2-Dichloroethane	13
		Acetone	250 1700
		Ethylbenzene Toluene	51
		Xylene	8700
		Arsenic	6000
		Cadmium	760
		Chromium	30000
		Lead	29000
		Barium Cyanide	77000 390
B2-7A	13-15'	Cyaniac	330
		1,1,1-Trichloroethane	1200
		1,2-Dichloroethane	130
		Tetrachloroethene	580
		Trichloroethene	1800
		Arsenic Cadmium	9100 130
		Chromium	45000
		Lead	5100
		Barium	12000
B3-6A	11-13'		
		1,1,1-Trichloroethane	140
		Tetrachloroethene Trichloroethene	12 88
		Arsenic	3100
		Cadmium	210
		Chromium	3600
		Lead	2200
B3-8A	15-17'	Barium	18000
D3-0A	15-17	1,1,1-Trichloroethane	7300
		1,1-Dichloroethane	300
		Tetrachloroethene	13
		Trichloroethene	12900
		1,1-Dichloroethene	130
		trans-1,2-Dichloroethene Arsenic	17 6800
		Cadmium	310
		Chromium	48000
		Lead	4700
		Barium	15000
B4-1A	4-6'	1,1,1-Trichloroethane	45
		Tetrachloroethene	14
		Tetrachloroethene	82
		Arsenic	3100
		Cadmium	21000
		Chromium	97000
		Lead Barium	11000 230000
		Cyanide	3500
B4-5A	13-15'	• • • •	2200
		1,1,1-Trichloroethane	15
		Tetrachloroethene	12
		Arsenic	1600
		Cadmium Chromium	150 3900
		Lead	2000
		Barium	24000

Table 2: 2012 Phase II Expanded Site Assessment Ground Water and Soil Results

Ground Water Sample Detections: December 2012

Soil Sample Detections: December 2012

		Concentration		Depth		Concnetration
Sample ID	Detected Chemical	(μg/L)	Sample ID	(feet)	Detected Chemical	(µg/kg)
MW1			SB1	19-20'		
	1,1,1-Trichloroethane	156			1,1,1-Trichloroethane	6650
	1,1,2-Trichloroethane	0.908J			1,1-Dichloroethane	155J
	1,1-Dichloroethane	54.4			Tetrachloroethene	1460
	Tetrachloroethene	6.91			Trichloroethene	12500
	Trichloroethene	215		20-21'		
	1,1-Dichloroethene	5.27			1,1,1-Trichloroethane	3720
	cis-1,2-Dichloroethene	3.75			1,1-Dichloroethane	155J
	trans-1,2-Dichloroethene	0.273			Tetrachloroethene	824
MW1D					Trichloroethene	8770
	1,1,1-Trichloroethane	155	SB2	16-17'		
	1,1,2-Trichloroethane	1.00J			Chlorobenzene	59.9J
	1,1-Dichloroethane	55.3			1,1,1-Trichloroethane	3010
	Tetrachloroethene	6.90			Tetrachloroethene	180
	Trichloroethene	217			Trichloroethene	4390
	1,1-Dichloroethene	5.31	SB3	14.5'		
	cis-1,2-Dichloroethene	3.82			Methylene chloride	347J
	trans-1,2-Dichloroethene	0.340			1,1,1-Trichloroethane	36100
MW2					1,1-Dichloroethane	317J
	1,1,1-Trichloroethane	11.7			Tetrachloroethene	1940
	1,1-Dichloroethane	6.30			Trichloroethene	38700
	Tetrachloroethene	6.83		16'		
	Trichloroethene	21.6			1,1,1-Trichloroethane	43500
	cis-1,2-Dichloroethene	2.42			1,1-Dichloroethane	1210
MW3					Tetrachloroethene	127J
	1,1,1-Trichloroethane	302			Trichloroethene	63500
	1,1-Dichloroethane	45.1			1,1-Dichloroethene	351J
	Tetrachloroethene	12.8			cis-1,2-Dichloroethene	94.5J
	Trichloroethene	237		17'		
	1,1-Dichloroethene	8.16			1,1,1-Trichloroethane	14300
	cis-1,2-Dichloroethene	3.75			1,1-Dichloroethane	633
	trans-1,2-Dichloroethene	0.393			Trichloroethene	26300
MW4					1,1-Dichloroethene	97.0J
	1,1,1-Trichloroethane	3.84		20'		
	1,1-Dichloroethane	0.471			Methylene chloride	174J
	Tetrachloroethene	0.898			1,1,1-Trichloroethane	73.9J
	Trichloroethene	8.92			1,1-Dichloroethane	1550
GW1					Trichloroethene	9740
	Benzene	0.354J			cis-1,2-Dichloroethene	205J
	cis-1,2-Dichloroethene	2.16J	SB4	20'		
	Toluene	0.450J			1,1,1-Trichloroethane	34300
					1,1-Dichloroethane	4610
GW2					Tetrachloroethene	4770
	Benzene	0.247J			Trichloroethene	60500
	Toluene	0.723J			1,1-Dichloroethene	373J
					cis-1,2-Dichloroethene	193J

J - The analyte was positively identified, but the quantitation was below the reporting limit **Bold** - Chemical detected above the maximum contaminant level

J - The analyte was positively identified, but the quantitation was below the reporting limit

Appendix C

Well Logs

TYPE OR USE PEN SELF TRANSCRIBING

SECTIONS OF THE SECTION OF THE SECTI

Ohio Department of Natural Resources, Divison of Water 1939 Fountain Square Drive, Columbus, Ohio 43224 Phone (614) 265-6739

PRESS HARD			Permit Number
DUNTY Montgomery	TOWNSH	HPDe	SECTION/LOT No (CIRCLE ONE)
WNER/BUILDER Globe Industries		F	PROPERTY ADDRESS 1784 STanley Bue, (ADDRESS OF WELL LOCATION A)
OCATION OF PROPERTY	STanley	Ave	and I-75, Swearner
	CON	ISTRUC'	TION DETAILS
ASING Borehole Diameter 8	in.		GROUT Volclay
	hickness		Material Caracter Sevolume used 125/65
	hickness	in.	Method of installation Tremie Depth: placed from 0.0 ft. to 5.0
pe: 1 Steel 2 Galv. 2 PVC 2 Othe			
<u> </u>	er		GRAVEL PACK (Filter Pack) Material Quartz Sand Volume used 3 61.3
nte: "Throadod Wolded Colvert	er		Method of installation Posing
			Depth: placed from 21\$10 ft. to
REEN			Pitiess Device
e (wire wrapped, louvered, etc.) <u>5/offed</u> Mater	rial PUC		Use of Well MoniToring
gth 10 ft. Diameter 2		in.	☐ Rotary ☐ Cable ☑ Augered ☐ Driven ☐ Dug ☐ Other ☑
between 2-1:0 ft. and 11:0 ft. WELL LOG*	Slot - O	10	Date of Completion 5-4-94 WELL TEST
ICATE DEPTH(S) AT WHICH WATER IS ENCOUNTER	FD.		A.
Show color, texture, hardness, and formation:			☑ Bailing ☐ Pumping* ☐ Other
andstone, shale, limestone, gravel, clay, sand, etc.	From	То	Drawdown
FM	0.0	2.0	Measured from: top of casing ☐ ground level ☐ Other Static Level (depth to water) 14-24 ft. Date: 5-11-94
Gray Clay, some silt	2,0	2.0	Quality (clear, cloudy, taste, odor) 5/00dy
Sand and gravel	かる	21.0	*(Attach a copy of the pumping test record, per section 1521.05, ORC)
·			PUMP
Water at 14.75			Type of pump Non e Capacity g
100121 41 (1173			Pump set at
			Pump installed by
			SKETCH SHOWING WELL LOCATION
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-		Show distances well lies from numbered state highways, street intersections, county roads, etc.
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ACCOUNT COLD BY			
The state of the s			
2.00002.5	-	 	
ditional space is needed to complete well log, use next consec	utively numb	ered form	S DNR 7802.
ng Firm Bowsen-Monner			Signed Stephen D. Sommer
4518 Taylorsville Rd.		•	Date 5-20-94
State, Zip Dayton OH 45424			ODH Registration Number
<u> </u>			Ohn Registration Number Thio Revised Code - file within 30 days after completion of drilling.
ORIGINAL COPY TO - ODNR	DIVISION	OF WAT	FER, 1939 FOUNTAIN SQ. DRIVE, COLS., OHIO 43224
			iller's copy Green - Local Health Dept. copy
0011			· · · ·

TYPE OR USE PEN SELF TRANSCRIBING

Ohio Department of Natural Resources, Divison of Water 1939 Fountain Square Drive, Columbus, Ohio 43224 Phone (614) 265-6739

OWNER/BUILDER Globe Industries (CIRCLE ONE OR BOTH) LOCATION OF PROPERTY THE STATES STA	walas "				(ADDRESS OF WELL LOCATION A)
LOCATION OF PROPERTY				ETAILS	orner
	in.	<u> </u>	GROUT		
				Volciay	
-	hickness	in		of installation Trem	tt. to 60
Type:	or			placed from <u>ち。</u> C L PACK (Filter Pack)	
	OI			QUAVIZ	Volume used 2 FT3
Joints: Threaded Welded Solvent 2 Oth	er		Method	of installation Pou	ned to 2-0
Liner: LengthType Wall The SCREEN	nickness	in		placed from 19,0	tt. to 2-0
Type (wire wrapped, louvered, etc.) 5 to Tred Mater	rial PVC	•	Use of \	Well MoniTovik	eg Preassembled unit
Lengthft. Diameter	2	in.	☐ Rota	ıry □Cable ⊠Auge	red Driven Dug Other
Set between 19,0 ft. and 9:0 ft. WELL LOG*	Slot *O	10	Date of	Completion 5-4-9	WELL TEST
INDICATE DEPTH(S) AT WHICH WATER IS ENCOUNTER	IED.			na 🗆 P	umpina* i``l Other
Show color, texture, hardness, and formation:		T _	Test rat	tegp	m Duration of test
sandstone, shale, limestone, gravel, clay, sand, etc.	From	То	Drawdo	own	AL RANGE
F:\/\	0.0	3.0	Measur Static	red from: K top of cas	ing □ ground level □ Other <u></u> [1-14
brown Clay, some silt	3.0	8.0		(clear, cloudy, taste, ode	
brown sand and gravel	8-0	19.0	*(Attach	h a copy of the pumping	test record, per section 1521.05, ORC)
					PUMP
Water at 12.0		-	Type of	DUMD NONE	Capacity
water at 12.0				•	
			Pump in	stalled by	WING WELL LOCATION
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2-Configure care com-			-		
"If additional space is needed to complete will log, use next consec	cutively number	ered form.	<u> </u>		S DNR
Drilling Firm Bowsen - Monner			Signad :	Stephen D	
HEIOT I WAI			oignea	5-20-au	
City, State, Zip Dayton OH 45424	•		ODH Reg	jistration Number	

TYPE OR USE PEN SELF TRANSCRIBING PRESS HARD

Ohio Department of Natural Resources, Divison of Water 1939 Fountain Square Drive, Columbus, Ohio 43224 Phone (614) 265-6739

PRESS HARD		,	Permit Number						
COUNTY Montgomery	TOWNSH	IIP <i>Da</i>	SECTION/LOT No. (CIRCLE ONE)						
OWNER/BUILDER Globe Industries (CIRCLEONECREDITE)		F	PROPERTY ADDRESS 1784 S Tanle Ave (ADDRESS OF WELL LOCATION A)						
LOCATION OF PROPERTY BANGARAGUA 57	anley	Avenu	ve and I-25,5 W corner						
EGOATION OF THOLEINT			TION DETAILS						
CASING Borehole Diameter 3	_in.		GROUT						
•			n. Material Volclay Volume used 75 163						
	ckness	in.	Depth: placed from 5.0 Them it to 1.0 ft.						
Type: Type: Galv. PVC (2)Other			GRAVEL PACK (Filter Pack)						
			Material Quartz Volume used 3 673						
Joints: $\sqrt[3]{\text{Threaded}}$ $\sqrt[3]{\text{Welded}}$ $\sqrt[3]{\text{Solvent}}$ $\sqrt[3]{\text{2Other}}$			Method of installation_Poored						
	kness	in.	i. Depth: placed from 19.0 ft. to 2-0 ft.						
SCREEN Type (wire wrapped, louvered, etc.)	DUC		Pitless Device ☐ Adapter ☐ Preassembled unit Use of Well ☐ Moni Towing ☐ Preassembled unit						
Length 10 ft. Diameter 2	1 <u> </u>		. □ Rotary □ Cable ■ MAugered □ Driven □ Dug □ Other						
Set between 19.0 ft. and 9.0 ft. S	Slot +O		Date of Completion 5-5-94						
WELL LOG*			WELL TEST						
INDICATE DEPTH(S) AT WHICH WATER IS ENCOUNTERED	D.								
Show color, texture, hardness, and formation: sandstone, shale, limestone, gravel, clay, sand, etc.	From	То	Test rate gpm Duration of test hrs. Drawdown ft.						
fill	0.0	1.0	Measured from: ⊠top of casing ☐ ground level ☐ Other						
come lay, some silt	1.0	2.5	Static Level (depth to water) 12.08 ft. Date: 5-11-94 Quality (clear, cloudy, taste, odor) 5/0004						
Brown sand and grovel	7.5	14.5	·						
			*(Attach a copy of the pumping test record, per section 1521.05, ORC)						
Gray fine sand	14.5	19.0	PUMP						
			Type of pump None Capacity gpm Pump set at ft.						
water at 14.5			Pump set atft. Pump installed byft.						
			SKETCH SHOWING WELL LOCATION						
			 Show distances well lies from numbered state highways, street intersections, county roads, etc. 						
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			Globe Motors						
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conference of the state of the			1 - s						
"If additional space is needed to complete well log, use next consecut	i ively numbe	i ered form.	DNR 7802.90						
Drilling Firm Bowser - Morner			Signed Stephen D. Somer						
Address 4518 Taylorsville Rd.			Date 5-20-94						
City, State, Zip Da-Ton, OH 45424			ODH Registration Number						

TYPE OR USE PEN SELF TRANSCRIBING

Ohio Department of Natural Resources, Divison of Water 1939 Fountain Square Drive, Columbus, Ohio 43224 Phone (614) 265-6739

PRESS HARD			Permit Number
COUNTY Montgomery	TOWNSHI	P Da	SECTION/LOT No. (CIRCLE ONE)
OWNER/BUILDER Globe Industries (CARCLEONEORBOTH)			PROPERTY ADDRESS 1784 STanky Ave. (ADDRESS OF WELL LOCATION A)
LOCATION OF PROPERTY STUNIEY Ave o			
EGOAHON OF THE ERRY			TION DETAILS
CASING Borehole Diameter 🕏	in.		GROUT
Diameter 2 in. Length 10 ft. Wall Thi	ckness	in.	Material Convent/bentonie Volume used
2 Diameter in. Length ft. Wall Thi	ckness	in.	Method of installation Treme
Type: Steel Galv. PVC Other 2 Other			Depth: placed from 5:0 ft. to 1:0 ft.
Type: $\frac{1}{2}$ Steel $\frac{1}{2}$ Galv. $\frac{1}{2}$ PVC $\frac{1}{2}$ Other			GRAVEL PACK (Filter Pack)
Joints: Threaded 1 Welded 2 Solvent 2 Other			Material Natural/ Quartz Volume used 1.5 Ft3
	·		
	kness	in.	Depth: placed from \$0.0 ft. to \$0.0 ft.
SCREEN Type (wire wrapped, louvered, etc.) SlotTed Materia	PUC		Pitiess Device ☐ Adapter ☐ Preassembled unit Use of Well Monitoring
	2		☐ Rotary ☐ Cable A Augered ☐ Driven ☐ Dug ☐ Other
	Slot +O!		Date of Completion
WELL LOG*			WELL TEST
INDICATE DEPTH(S) AT WHICH WATER IS ENCOUNTERE	D.		
Show color, texture, hardness, and formation:			Test rate gpm Duration of test hrs.
sandstone, shale, limestone, gravel, clay, sand, etc.	From	То	Drawdown bailed dry th.
Fill	0.0	7,0	Measured from: Matter Matter Matter Measured from Measured from
Brown Clay, Some silt	7.0	10,5	Quality (clear, cloudy, taste, odor)
Sand and gravel	10.5	20.5	*(Attach a copy of the pumping test record, per section 1521.05, ORC)
			PUMP
	T		Type of pump None Capacity gpm
			Pump set atft.
	1		Pump installed by
			SKETCH SHOWING WELL LOCATION
			Show distances well lies from numbered state highways, street intersections, county roads, etc.
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्राकृतकार प्रकार के प्रका	tively number	ed form	S) '
41 7 7 7	avery municipal	oo idiiii.	_
Drilling Firm Bawser- Morner			Signed Stepley D. Sowner
Address 4518 Tarrlors withe Redi			Date 5 - 20 - 24
City, State, Zip Day Ton, Ohio 4542	4		ODH Registration Number
			Obj. Declared Onder The other Do down stress of the Column

		LOCATION SKETCI (NOT TO SCALE)	Н		WELL NO. Total Depth Sheet	BNMW-1 18.0 feet 1 of	2		BURG	ESS &	& NIP	LE ntists
					Project:	Former Simclar - 1784 Stanley Ave., Day	ton, OH	Start Drilling:	Time:	9:30am	Date:	4/14/2015
					Project No.:	53939		Complete Drilling:	Time:	10:00am	Date:	4/14/2015
					Logged By:	Michael Akins		Start Installation:	Time:	10:05am	Date:	4/14/2015
•					Drilling Contr			Complete Installation:	Time:	10:40am	Date:	4/14/2015
N	ı	Ground Surface Elevation:		3.87	Driller's Name			1/ 1/ 0	~ .		Depth to	
	1	Top of Casing Elevation:		3.60	Drill Rig Type			ds Used (gal): 0	Date	Time	Water	Notes
		Elevation Units:	feet above n	nean sea level	Sampling Met X / Y Coordin		Borehole Dian					
Elev.	Danth		Well /	General	1	<u> </u>	chedule 40 PVC	1,495,159.6171				
in feet	Depth in		Boring	Geologic	Hammer Weig		Drop:	30" Auto Hammer				
amsl	Feet	Well Installation Notes	Description	Log	Location Desc							
anisi	1 cct	Wen instanation (votes	Description		Location Desc	Sample Description		d Stainey Ave.	Dr	illing Observatio	ns	Field
	0	Flushmount Well		TOPSOIL		Sample Bescription			Interval	Blow Counts	Recovery	Screen (ppm)
				7	0.0-0.4'	Black Sandy Topsoil, slightly moist, very	v soft trace gra	iss roots	0-2'	1-2-3-4	1.1 ft.	0.0
					0.4-2.1'	Brown Sandy Silt (FILL), slightly moist,			0.2	1231	1.1 10.	0.0
		0.0-1.0 - 2 x 2 concrete pad.			0.4-2.1		very sort, some	e fille salid,				
				FILL		trace gravel, trace black coal fragments.						
		1.0-7.0' - Medium bentonite chips										
		hydrated with potable water.							2-4'	2-3-8-9	0.8 ft.	0.0
		3 (50 lbs.) bags.			2.1-4.0'	Dark Brown Sandy Clay (CL), slightly m	noist, very soft,	some fine sand,				
						no plasticity.						
					4.0-6.0'	SAA (CL).			4-6'	2-2-3-3	1.0 ft.	0.0
	5			CL	4.0-0.0	Brit (CL).			4-0	2-2-3-3	1.0 1t.	0.0
_	3_	2.7.40.01.21.11.40		CL								
		0.5-10.0' - 2" diameter, Schedule 40										
		PVC riser.										
					6.0-7.5'	SAA (CL), firm, low plasticity.			6-8'	1-2-3-4	1.6 ft.	0.0
					7.5-8.0'	Brown Silty Sand (SM), slightly moist, le	oose, fine to ve	ery coarse, poorly				
				SM		sorted, few silt.		, ,				
		7.0-18.0' - Clean No. 5 silica		5:12	8.0-9.0'	SAA (SM), Gray to orange brown color,	very soft little	cilt	8-10'	1-4-3-3	1.2 ft.	0.0
		sand. 3.5 (100 lbs.) bags.		SW	6.0-2.0	SAA (SW), Gray to Grange Grown color,	very sort, muc	Siit.	8-10	1-4-5-5	1.2 1t.	0.0
		sand. 3.5 (100 lbs.) bags.	<u> </u>	SW			a 1.0000					
					9.0-9.8'	Gray brown, orange-yellow brown, gray	Sand (SW), mo	oist, loose, poorly				
	10					sorted, fine to very coarse.						
		9.0-18.0' - 2" diameter,	-		9.8-10.0'	SAA (SW), gray, wet, trace gravel.			10-12'	3-4-10-10	1.0 ft.	0.7
		Schedule 40 PVC well screen with	-		10.0-12.0'	Gray Sand and Gravel (SW/GW), wet, lo	ose, poorly sor	rted, fine to very				
		0.010" factory cut slots.	-			coarse, limestone gravel.						
		Ž	- -	SW/GW		, ,						
				5117611	12.0-14.0'	SAA (SW), brown, wet, trace green cobb	ale and aray lin	nestone cobble	12-14'	5-11-20-17	0.7 ft.	1.2
					12.0-14.0	SAA (S w), blown, wet, trace green cool	one and gray iii	nestone coodic.	12-14	3-11-20-17	0.7 It.	1.2
			-									
			— I									
			-									
			-		14.0-15.7'	SAA (SW), gray brown, trace gray limes	tone gravel.		14-16'	5-15-15-9		1.3
	15				I							

WELL NO.

BNMW-1

Total Depth Sheet 18.0 feet ______



Elev.	Depth		Well /	General					
in feet	in		Boring	Geologic	Sample Description		Drilling Ob		Field
amsl	Feet	Well Installation Notes	Description	Log		Interval	Blow Counts	Recovery	Screen (ppm)
	15		4 -	SW/GW	15.7-16.0' Gray Silty Clay (CL/TILL), slightly moist, hard, trace very coarse gravel				
			1 -		and sand, low plasticity.				
			-		16.0-18.0' SAA, trace sand seams ~0.01', thick throughout, moist, very hard,	16-18'	5-14-14-15	1.0 ft.	0.8
			- I	\mathbf{CL}	no plasticity.				
		18.0' - PVC end cap.							
					Boring terminated at 18.0 feet below ground surface.				
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Project Proj			LOCATION SKETCH (NOT TO SCALE)	Н				WELL NO.		BNMW-2 22.0 feet		2	E	BURG	ESS Environm	& NIP	LE
Proc. Proc								Sheet		1							
March Surface								Project:	Former Sir	mclar - 1784 Stanley Ave	., Dayton, OH	H Sta	art Drilling:	Time:	11:30am	Date:	4/14/2015
Part								Project No.:	53939			Co	omplete Drilling:	Time:	12:15pm	Date:	4/14/2015
Constraint Con								- 66 - 7									
Post Top of Casing Elevation File File Service File Service	4						_					Co	omplete Installation:	Time:	1:00pm		4/14/2015
Part	N	.1	-										II. 1 (1) 0	ъ.	m:	-	37.
Note Continue Note Not	'	V		fo									- C	Date	Time	Water	Notes
Dept First			Elevation Units:	16	et abov	e mea	iii sea ievei										
Total Final Fina	Flev	Denth		,	Well /	Т	General						7)3,12).4130				
Feet Well Installation Notes Description Log Logation Description Sample Description Sample Description Defiling Observations Field Survey Clay Screen (pgm)													" Auto Hammer				
ASPHALT Sample Description Dilling Observations Field Section Se			Well Installation Notes		_	n	_		~				Titto Tittimio				
Section Sect														Dı	rilling Observatio	ns	Field
0.0-1.0' - 2' x 2' concrete pad. 0.2'		0		_		_ A	ASPHALI				_			Interval	Blow Counts	Recovery	Screen (ppm)
10.8.0° - Bentonite grout. 2.0-2.4° Dark orange brown Sandy Clay (FILL), moist, very soft, low plasticity 2-4° 1-2-2-2 1.7 ft. 0.6			8" diameter steel protector.		I			0.0-0.2'	Asphalt.					0-2'	2-4-4-6	0.7 ft.	1.3
File				۵ ۵		\triangle		0.2-2.0'	Grav brown	n Sand and Gravel (FIL)	L), dry, loose,	e, poorly so	rted.				
10.0-18.0° - Bentonite grout. 2.0-2.4° Dark orange brown Sandy Clay (FILL), moist, very soft, low plasticity 2.4° 1-2-2.2° 1.7 ft. 0.6			•						fine to very	v coarse		-1 -	,				
2.0-2.4			1.0-8.0' - Rentonite grout							J							
FILL trace slag. 2.4-4.0° Dark brown Sandy Clay/Clayey Sand (FILL), very moist, very soft, some			1.0-0.0 - Bentonite grout.					2 0 2 4'	Dork orong	go brown Sandy Clay (E	II) moist v	vorv soft le	wy placticity	2.4'	1222	1.7 ft	0.6
PVC riser.			0.5.10.01.01111	1			EILI	2.0-2.4			LL), IIIOISI, V	very sort, ro	ow plasticity	2-4	1-2-2-2	1.7 11.	0.0
fine to medium sand, trace broken white snail shells. 4.6 0.0-2-2 1.6 ft. 0.6			,	1			FILL	2 4 4 01			1 (577.7.)						
4.0-5.5' SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 CL/SC SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 CL/SC SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 CL/SC SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 CL/SC SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 CL/SC SAA (FILL), trace slag at 7.5' bgs. 4-6' 0-0-2-2 1.6 ft. 0.6 SAA (FILL), trace slag at 7.5' bgs. 4-6' 1.5 ft. 0.6 SAA (FILL), trace slag at 7.5' bgs. 4-6' 1.5 ft. 0.6 SAA (FILL), trace slag at 7.5' bgs. 4-6' 1.5 ft. 0.6 SAA (FILL), trace slag at 7.5' bgs. 4-6' 1.5 ft. 0.6 SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			PVC riser.					2.4-4.0'					very soft, some				
5.5.8.0° Dark brown Sandy Clay/Clayey Sand (CL/SC), very moist, very soft,										,	white snail sh	shells.					
S.5-8.0' Dark brown Sandy Clay/Clayey Sand (CL/SC), very moist, very soft. Some fine to medium sand, trace broken white snail shells. 6-8' 0-1-2-4 1.7 ft. 0.6								4.0-5.5'	SAA (FILI	L), trace slag at 7.5' bgs.				4-6'	0-0-2-2	1.6 ft.	0.6
Some fine to medium sand, trace broken white snail shells. 6-8' 0-1-2-4 1.7 ft. 0.6		5_															
Some fine to medium sand, trace broken white snail shells. 6-8' 0-1-2-4 1.7 ft. 0.6																	
SW SW SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14.16' 10.15-18-16 0.6 ft. 1.8								5.5-8.0'	Dark brow	vn Sandy Clay/Clayey Sa	nd (CL/SC),	very moist	, very soft,				
8.0-10.0' - Medium bentonite chips hydrated with potable water. 10 10-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags.									some fine t	to medium sand, trace b	roken white s	snail shells.		6-8'	0-1-2-4	1.7 ft.	0.6
8.0-10.0' - Medium bentonite chips hydrated with potable water. 10 10-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags.							CL/SC										
8.0-10.0' - Medium bentonite chips hydrated with potable water. 10 10.0-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags. 12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8																	
8.0-10.0' - Medium bentonite chips hydrated with potable water. 10 10.0-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags. 12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8																	
8.0-10.0' - Medium bentonite chips hydrated with potable water. 10 10.0-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags. 12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8								8 O 10 O'	Light orang	ago vollous grov brown C	rovally Cand ((SW) sligh	ntly moist	9 10'	1615	1.2 ft	1.7
10.0-18.0' - Clean No. 5 silica 10.0-12.0' SAA (SW), slightly moist, compact to loose. 10-12' 5-8-8-6 1.5 ft. 2.3 12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW SW/GW SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			9.0.10.0! Madissas handasita ahisa					8.0-10.0					itty moist,	6-10	4-0-4-3	1.2 11.	1.7
SW 10.0-18.0' - Clean No. 5 silica 10.0-18.0' - Clean No. 5 silica 10.0-12.0' SAA (SW), slightly moist, compact to loose. 10-12' 5-8-8-6 1.5 ft. 2.3 1.5 ft. 2.3 1.5 ft. 2.5 1.5 ft.									ioose, poor	orly sorted, line to very co	arse, ninesto	one gravei.					
10.0-18.0' - Clean No. 5 silica sand. 3.5 (100 lbs.) bags. 12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW), slightly moist, compact to loose. 10-12' 5-8-8-6 1.5 ft. 2.3			hydrated with potable water.				CITY										
Sand. 3.5 (100 lbs.) bags.	_	10_					SW										
12.0-22.0' - 2" diameter, Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 12-14' 6-6-7-12 0.7 ft. 2.0 0.7 ft. 2.0 12-14' 6-6-7-12 0.7 ft. 2.0 12-14' 6-6-7-12 0.7 ft. 1.8			10.0-18.0' - Clean No. 5 silica					10.0-12.0'	SAA (SW)), slightly moist, compac	t to loose.			10-12'	5-8-8-6	1.5 ft.	2.3
Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			sand. 3.5 (100 lbs.) bags.														
Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8																	
Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8												<u></u>	·				
Schedule 40 PVC well screen with 0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			12.0-22.0' - 2" diameter,					12.0-14.0'	Gray to bro	own Sand and Gravel (S	W/GW), wet,	t, loose, fine	e to very coarse,	12-14'	6-6-7-12	0.7 ft.	2.0
0.010" factory cut slots. SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			·		1 1888					,			· · · · · · · · · · · · · · · · · · ·				
SW/GW 14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8					l 1888				1 3								
14.0-16.0' SAA (SW/GW), brown, wet, loose, trace silt, green and gray cobbles. 14-16' 10-15-18-16 0.6 ft. 1.8			and a substitution of the														
					-				SAA (SW/	(GW) brown wat lease	trace silt am	roon and an	av cobbles	1/1 16'	10 15 19 16	0.6 ft	1 9
		15			-			1 7.0-10.0	D1111 (D W/	, 5 , 7, 010 wii, wet, 100se	, auce siit, git	reen and gr	u _j 0000103.	14-10	10-13-10-10	0.011.	1.0

WELL NO.

BNMW-2

Total Depth Sheet 22.0 feet

of 2

BURGESS & NIPLE Engineers • Environmental Scientists

Elev.	Depth in		Well / Boring	General Geologic	Sample Description		Drilling Ob		Field
amsl	Feet	Well Installation Notes	Description	Log		Interval	Blow Counts	Recovery	Screen (ppm)
	15			SW/GW					
			-			<u> </u>			
					16.0-17.0' Gray to brown Sand and Gravel (GW), wet, loose, fine to very coarse,	16-18'	15-18-17-12	1.0 ft.	
				GW	poorly sorted, trace limestone cobbles.				
			-		17.0-18.0' SAA, (GW), with gray limestone cobbles.				
			-		18.0-19.6' Gray Brown Sand (SW), wet, fine to very coarse, poorly sorted, loose,	18-20'	0-2-11-9	1.9 ft.	2.4
			T -	SW	trace silt.				·
]						
_	20				19.6-20.0' Gray brown Sand and Gravel (GW), wet, loose, fine to very coarse,				
				GW	poorly sorted, trace silt.	20-22'		0.9 ft.	1.4
					20.0-22.0' Sandy Gravel (GW), wet, loose, fine to coarse gravel, fine to coarse				
		22.0' - PVC end cap.			sand, trace sand, trace cobbles.				
					Boring terminated at 22.0 feet below ground surface				
			_						
I _	25								
l _	30								
									1
			_						1
	35			<u> </u>					

						1								
		LOCATION SKETCI	Н											
		(NOT TO SCALE)				WELL NO.	Γ	BNMW-3	7		3URG	ESS 8	& NIP	PLE
		,				Total Depth		20.0 feet		Ē	ngineers	Environm	nental Scie	ntists
						Sheet	-	1 of	2					
							-							
						Project:	Former Sime	nclar - 1784 Stanley Ave., Day	yton, OH	Start Drilling:	Time:	2:50pm	Date:	4/14/2015
						Project No.:	53939	• • •		Complete Drilling:	Time:	3:40pm	Date:	4/14/2015
						Logged By:	Michael Akin	ns		Start Installation:	Time:	3:45pm	Date:	4/14/2015
						Drilling Contr	actor:	Wright's Drilling		Complete Installation:	Time:	4:10pm	Date:	4/14/2015
	` 	Ground Surface Elevation:			48.12	Driller's Name		Brian, Densil, and Jason Wrig					Depth to	
	1	Top of Casing Elevation:			17.84	Drill Rig Type		CME 75		ds Used (gal): 0	Date	Time	Water	Notes
'		Elevation Units:	feet	above 1	mean sea level	Sampling Met		2" x 2' SS Split-Spoon	Borehole Dian					
F1	Donat		337	.11. /	G1	X / Y Coordin		North: 655,148.9327		1,495,129.4136				
Elev.	Depth in			ell / ring	General Geologic	Hammer Weig	Joint Type, and	140 lbs.	Schedule 40 PVC Drop:	30" Auto Hammer				
in feet amsl	Feet	Well Installation Notes		ring	Log	Location Desc		Southeast edge of parking lot.	Drop:	30 Auto Hammer				
anisi	reet	wen instanation Notes	Desci	прион		Location Desc	ription.	Sample Descripti	ion		Dı	rilling Observatio	ins	Field
	0	Flushmount Well			ASPHALT			Sumple Descripti	1011		Interval	Blow Counts	Recovery	Screen (ppm)
	_				7 7	0.0-0.2'	Asphalt.				0-2'	2-3-7-6	1.2 ft.	2.0
					7	0.2-2.0'		very dark gray clay, sand, cin	dare foundry es	and slag (FILL)	0.2	20,0	112 10	2.0
		0.0-1.0 - 2 x 2 concrete pau.				0.2-2.0				iliu, siag (FILL),				
							moist, very s	soft, trace white glass and pi	ink brick.					
		1.0-9.0' - Bentonite grout.												
						2.0-4.0'	SAA (FILL)), slightly moist, trace coal.			2-4'	2-2-1-1	1.3 ft.	1.0
		0.5-13.0' - 2" diameter, Schedule 40												
		PVC riser.			FILL									
						4.0-6.0'	SAA (FILL)), with some orange sand.			4-6'	1-1-1-1	0.6 ft.	1.0
	5						21111 (1111)	,,					010 20	
_														
						6.0-8.0'	SAA (FILL)), black, very moist to wet.			6-8'	0-0-1-1	0.6 ft.	0.9
						8.0-10.0'	Dark olive g	gray Sandy Clay (CL), very r	noist, very soft,	low plasticity,	8-10'	0-0-1-2	2.0 ft.	0.8
								o very coarse sand, trace whi		*				
		9.0-11.0' - Medium bentonite chips						scoloration (decayed roots).	,					
	10	hydrated with potable water.			CL		mottnig/dis	scoloration (decayed roots).						
_	10_	nydrated with potable water.			CL	10.0.11.01	CAA (CI)		C.		10.101	0.1.0.10	1.66	
						10.0-11.8'	SAA (CL), t	trace gravel, very moist, very	y soft.		10-12'	0-1-9-10	1.6 ft.	1.1
		11.0-20.0' - Clean No. 5 silica												
		sand. 3 (100 lbs.) bags.				11.8-12.0'	Gray brown	Gravelly Sand (SW), slightl	ly moist, loose,	poorly sorted,				
							fine to very	coarse, trace gray limestone	cobble.		12-14'	4-11-11-12	1.2 ft.	2.1
						12.0-13.8'	SAA (SW),	gray brown, slightly moist, l	loose.					
							, , , , , , ,							
		13.0-20.0' - 2" diameter,			sw	13.8-14.0'	SAA (SW),	very moist						
		Schedule 40 PVC well screen with		-	5,11	14.0-16.0'		wet, brown, few gray limest	tone cobbles to	aca silt	14-16'	6-9-11-9	1.3 ft.	3.0
		0.010" factory cut slots.	-			14.0-10.0	SAA (SW),	wei, blown, iew gray iimest	ione coobles, tra	ice siit.	14-10	U-7-11-7	1.3 11.	3.0
1	13	O.OTO TACIOTY CUI SIOIS.		Date of the last o	860	1					1			

WELL NO.

BNMW-3

Total Depth Sheet 20.0 feet 2 of 2



Elev.	Depth		We	ell /	General						
in feet	in		Bor	ring	Geologic		Sample Description		Drilling Ob	servations	Field
amsl	Feet	Well Installation Notes	Descr	iption	Log			Interval	Blow Counts	Recovery	Screen (ppm)
	15				sw						
					l sw						
				-		16.0-18.0' B	srown Sand and Gravel (SW/GW), wet, loose, poorly sorted, fine to	16-18'	5-8-8-8	1.1 ft.	1.9
				-			ery coarse, limestone and granite cobbles/gravel.	10 10	2000	1.1 10.	1.5
			-	-	SW/GW	Ve	ery coarse, limestone and gramte cobbles/gravet.				
				-							
			_ -	-							
			_	-	sw	18.0-19.0' B	Brown SAA (SW), wet, loose.	18-20'	6-16-20-26	0.9 ft.	1.1
			-	-	l sw						
				-		19.0-20.0' G	Gray Sandy Silty Clay (CL/TILL), slightly moist, very hard, trace very				
	20	20.0' - PVC end cap.	-	-4	CL/TILL		oarse sand, trace fine gravel, no plasticity.				
_	20	20.0 - 1 ve chu cap.									
			-			Boring termina	ted at 20 feet below ground surface.				
			_								
	25										
			-								
	20										
_	30										
					1						
					1						
			+								
			-								
			4								
					1						
					1						
	35										
					•					•	

		LOCATION SKETCI	H			WELL NO.	BNMW-3D	1		BURG	ESS S	R. NIID	IE
		(NOT TO SCALE)				WELL NO. Total Depth	35.0 feet]		Engineers	Environm	ontal Scio	ntiete
						Sheet	1 of	2	,	Ingineers •	LIIVIIOIIII	ieritai Scie	1111515
									_				
						Project: Fe	Former Simclar - 1784 Stanley Ave., Day	ton, OH	Start Drilling:	Time:	10:20am	Date:	4/21/2015
						,	3939		Complete Drilling:	Time:	10:45am	Date:	
							Michael Akins		Start Installation:	Time:	10:50am	Date:	4/21/2015
	1	Ground Surface Elevation:		748.0	18	Drilling Contractor Driller's Name:	or: Cascade Drilling Densel		Complete Installation:	Time:	11:20am	Date:	4/21/2015
	l	Top of Casing Elevation:		747.7		Drill Rig Type:	Sonic	Drilling Flu	ids Used (gal): 50	Date	Time	Water	Notes
	l '	Elevation Units:			an sea level	Sampling Methods			neter (inches): 6				
						X / Y Coordinates	s: North:	East	: -				
Elev.	Depth		Well /		General			chedule 40 PVC					
in feet			Boring		Geologic	Hammer Weight:		Drop:	NA				
amsl	Feet	Well Installation Notes	Description		Log	Location Descripti	ion: Southeast edge of parking lot. Sample Descripti	on		Dri	illing Observatio	ne	Field
	0	Flushmount Well			ASPHALT		Sample Descripti	OII		Interval	Blow Counts	Recovery	Screen (ppm)
			^ ^ _	Δ^_	7	0.0-0.2' A	Asphalt.			0-5'		2.0 ft.	1.8
				Δ			Brown and gray sand and gravel (FILL),	dry, loose, poo	orly sorted, fine				
				•			o very coarse.	J,, p	,				
							Black foundry sand (FILL), slightly moi	st loose/verv s	oft_trace_gravel				
							nd orange brick.	50, 10050, 1013 5	ori, irace graver				1.7
		0.5-25.0' - 2" diameter, Schedule 40					nd orange oriek.						1.7
		PVC riser.											
		1 ve liser.			FILL								
					FILL								2.4
	5												2.4
_	i -					5.0-6.0' S.	AA (FILL), very moist, very soft, few g	rravel trace als	ace and clar	5-15'		10.0 ft.	
		1.0-20.0' - Bentonite grout.				5.0-0.0	AA (FILL), very moist, very sort, rew g	graver, trace gra	iss and stag.	3-13		10.0 1t.	
		1.0-20.0 - Bentonite grout.				6.0-8.0' S.	AA (FILL), red/pink and brown gravel	ly sand with cr	ushed brick				1.2
							ery moist to wet, trace glass, trace cobb	•					1.2
						***	ery moist to wet, trace glass, trace cont	nes, trace blaci	x wood.				
						8.0-10.0' O	Dlive brown gray sandy Clay (CL), very	moist voruso	ft low placticity				0.8
							ew sand, trace white snail shells.	moist, very so	it, iow piasucity,				0.0
					\mathbf{CL}	10	ew saild, trace write shall shells.						
	10												
_	10					10.0-11.5' G	Gray brown Sand and Gravel (SW), very	moist loosa	noorly sorted fine				1.3
							o very coarse.	y 1110151, 1008C,	poorty sorted, fille				1.3
						10	5 reij comsc.						
						11.5-15.0' S.	AA (SW), wet.						
					SW	11.5-15.0 5	222 (O 11), WOL.						1.5
					577								1.J
													1.0
	15												1.0

Former Simclar - 1784 Stanley Ave., Dayton, OH WELL NO. BNMW-3D

Total Depth Sheet

35.0 feet 2



Elev.	Depth in			ell / ring	General Geologic		Sample Description		Drilling Ob	servations	Field
amsl	Feet	Well Installation Notes		ription			• •	Interval	Blow Counts	Recovery	Screen (ppm)
	15					15.0-17.0'	SAA (SW), gray brown, wet, few silt, trace cobbles.	15-25'		11.0 ft.	
	10		-			13.0 17.0	Stri (5 11), gray brown, wet, lew sht, trace cobbles.	13 23		11.010.	
			-		SW			+			1.2
			-								1.2
						17.0-23.0'	Gray Silty Clay (CL/TILL), slightly moist to moist, very hard/stiff, trace				
							very coarse sand and fine to coarse gravel, trace cobble, glacial till.				
											0.8
											0.0
	•		-		~~ .						
l –	20				CL/						
		20.0-23.0' - Medium bentonite chips			TILL						1.3
		hydrated with potable water.									(20-23')
			-								
			-								
			-								

		23.0-35.0' - Clean No. 5 silica				23.0-25.0'	Gray Sand (SW), wet, loose, fine to very coarse, poorly sorted, no silt.				8.3
		sand.									
	25		-								
-	_	25.0-35.0' - 2" diameter,	-			25.0.25.01	CAA (CW)	25.251		10.0.6	4.4
				-		25.0-35.0'	SAA (SW), gray, wet, trace fine gravel.	25-35'		10.0 ft.	4.4
		Schedule 40 PVC well screen with	-	-				ļ			(25-26')
		0.010" factory cut slots.		-							8.2
				-							
				-							
				-							
				_							0.4
			-	_	~						8.4
				_	SW						
				-							
	30_			-							
				-							15.2
			-	-							
			-	-		-					
			-	-							
				-				1			
				-							37.8
				-							
				-							
				-				1			
				-				+			
	2.		-	_				1			
	35	35' - PVC end cap.									

		LOCATION SKETCI (NOT TO SCALE)	H			WELL NO.		BNMW-4	1			ESS 8		
						Total Depth Sheet		19.5 feet 1 of	2			■ Environm		
						Sheet				-				
						Project:	Former	Simclar - 1784 Stanley Ave., Day	ton, OH	Start Drilling:	Time:	8:58am	Date:	4/15/2015
						Project No.:	53939			Complete Drilling:	Time:	10:00am	Date:	4/15/2015
						Logged By:	Michael			Start Installation:	Time:	10:05am	Date:	
A					4.0	Drilling Contr		Wright's Drilling		Complete Installation:	Time:	10:40am	Date:	4/15/2015
	I	Ground Surface Elevation:		745.1		Driller's Name		Brian, Densil, and Jason Wrigh		(1. II 1 / 1). O	Dete	TP:	Depth to	Maria
	1	Top of Casing Elevation: Elevation Units:	foot obo	744.8		Drill Rig Type Sampling Met		CME 75 2" x 2' SS Split-Spoon	Borehole Dian	ids Used (gal): 0 neter (inches): 8.25	Date	Time	Water	Notes
		Elevation Units.	reet abo	ove mea	ali sea ievei	X / Y Coordin		North: 655,330.9797		1,495,171.8958				
Elev.	Depth		Well /	/	General				chedule 40 PVC					
in feet	in		Boring	g	Geologic	Hammer Weig			Drop:	30" Auto Hammer				
amsl	Feet	Well Installation Notes	Descripti	ion	Log	Location Desc	cription:	East edge of property and south	h of former cher	nical storage area.				
					ASPHALT			Sample Description	on		Dı	rilling Observatio	ons	Field
	0	Flushmount Well	A .T	T .	4						Interval	Blow Counts	Recovery	Screen (ppm)
						0.0-0.2'	Asphalt.				0-2'	5-12-10-5	0.6 ft.	3.5
		0.0-1.0' - 2' x 2' concrete pad.		Δ		0.2-2.0'	Black fo	oundry sand (FILL), moist, very s	soft, fine sand.					
		1.0-5.5' - Medium bentonite chips.												
		•				2.0-4.0'	SAA (F)	ILL), trace slag, trace gravel, slig	htly moist.		2-4'	5-3-2-8	1.0 ft.	4.6
		0.5-9.5' - 2" diameter, Schedule 40			FILL	2.0	5111(11	in in the stage are graves, sing	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			5520	110 111	
		•			FILL									
		PVC riser.												
	_					4.0-5.5'	SAA (Fl	ILL), moist.			4-6'	1-2-1-1	1.8 ft.	2.9
_	5_													
		5.5-7.5' - Medium bentonite chips				5.5-6.0'	Dark oli	ive brown Gray Silty Clay (CL), 1	moist, very sof	t, low plasticity,				
		hydrated with potable water.			\mathbf{CL}		trace rec	d orange mottling.			6-8'	1-2-3-5	1.4 ft.	1.2
				_		6.0-6.4'	SAA (C	L), no mottling.						
						6.4-8.0'	Olive gr	ay brown Clayey Sand (SC), very	y moist, very s	oft, little clay, fine				
					SC		to very o	coarse sand, trace fine gravel.	-	•				
		7.5-19.5' - Clean No. 5 silica				8.0-9.0'		C), very moist.			8-10'	0-6-12-12	1.5 ft.	2.0
		sand. 3 (100 lbs.) bags.				0.0 7.0	5111 (5	<i>O</i> ,, <i>very</i> moise.			0.10	0 0 12 12	710 70	2.0
		3. (100 103.) bags.		_		9.0-10.0'	Light br	own Gravelly Sand (SW), dry, lo	oca poorly co	rtad fina to vary				
	10					7.0-10.0		trace limestone cobbles.	bose, poorry sor	ried, fille to very				
_	10_	0.5.10.51.01.11	- I			10.0.11.61					10.121	0.10.0.0	106	2.7
		9.5-19.5' - 2" diameter,	- 1		\mathbf{SW}	10.0-11.6'	SAA (S	W), brown gray color, wet, trace	sılt.		10-12'	8-10-8-8	1.0 ft.	2.7
		Schedule 40 PVC well screen with	_											
		0.010" factory cut slots.		_										
			- 1			11.6-12.0'	Orange	brown Sandy Gravel with Cobble	les (GW), wet,	loose, fine to very				
			- I				coarse, p	poorly sorted, trace silt.			12-14'	3-11-11-11	1.1 ft.	2.5
					GW	12.0-14.0'	SAA (G	W), orange brown to gray brown	n in color.					
			- 1		011									
						14.0-15.0'	SAA (G	W), orange brown color.			14-16'	5-4-3-2	1.0 ft.	2.9
	15													

WELL NO.

BNMW-4

Total Depth Sheet 19.5 feet 2

of <u>2</u>



H	1		T	I	1		1			
	Depth		Well /	General				5 01		
in feet	in	Will all a No.	Boring	Geologic		Sample Description		Drilling Ob		Field
amsl	Feet 15	Well Installation Notes	Description	Log SC CL	15.0-15.2'	Gray brown Clayey Sand (SC), wet, very soft, fine to very coarse.	Interval	Blow Counts	Recovery	Screen (ppm)
	15		-	CL SC	1					
				SC SW	15.2-15.5'	Gray Silty Clay (CL), moist, very soft, trace sand, low plasticity.	4 5 4 01	2226	0.2.0	
					15.5-15.7'	Brown Gray Clayey Sand (SC), very moist, very soft, some clay, fine to	16-18'	2-2-3-6	0.2 ft.	1.3
			-	SW/GW		very coarse sand.				
					15.7-16.0'	Brown Gravelly Sand (SW), wet, loose, fine to very coarse, trace silt.				
					16.0-18.0'	Orange Brown Sand and Gravel with Cobbles (SW/GW), wet, loose, low	18-19.5'	4-13-24	1.2 ft.	9.1
			<u> </u>	GW		recovery, trace silt.				
					18.0-18.7'	Orange Brown Sandy Gravel (GW), wet, loose, poorly sorted, fine to				
		19.5' - PVC end cap.		SW		very coarse, trace silt.				
	20		_		18.7-19.5'	Gray Gravelly Sand (SW), wet, loose, poorly sorted, fine to very coarse,				
						trace silt, trace limestone cobbles.				
					Boring tern	inated at 19.5 feet below ground surface.				
	ľ									
	25									
			1							
			1							
			-							
			-							
			-							
			4							
			4							
	20									
_	30		4							
			_							
			_							
			_							
	35		1							

		LOCATION SKETCI (NOT TO SCALE)	Н			WELL NO. Total Depth Sheet	BNMW-4SD 35.0 feet 1 of 2	E	BURG	ESS Environm	& NIP nental Scie	LE ntists
							r Simclar - 1784 Stanley Ave., Dayton, OH	Start Drilling:	Time:	10:30am	Date:	4/22/2015
						Project No.: 53939		Complete Drilling:	Time:	10:55am	Date:	4/22/2015
						Logged By: Michael		Start Installation:	Time:	11:10am	Date:	
4		Ground Surface Elevation:		746	5.00	Drilling Contractor: Driller's Name:	Cascade Drilling Densel	Complete Installation:	Time:	11:50am	Date:	4/22/2015
N		Top of Casing Elevation:			4.63	Drill Rig Type:		ids Used (gal): 50	Date	Time	Water	Notes
'	N	Elevation Units:	feet al			Sampling Methods:	Core Barrel Borehole Dian		Date	Time	water	ivotes
		Elevation omis.	Teet a	oove ii	icuii scu ic vei	X / Y Coordinates:	North: East:					
Elev.	Depth		Wel	1/	General	Casing Type, Joint Type						
in feet	in		Bori	ng	Geologic	Hammer Weight:	NA Drop:	NA				
amsl	Feet	Well Installation Notes	Descrip	_	Log	Location Description:	East edge of property and south of former cher	nical storage area.				
					ASPHALT	•	Sample Description	•	Dı	rilling Observation	ons	Field
	0_	Flushmount Well			ASITIALI				Interval	Blow Counts	Recovery	Screen (ppm)
			^ ^ _	_ \م ^م .		0.0-0.2' Asphal	t.		0-5'		3.0 ft.	0.8
		0.0-1.0' - 2' x 2' concrete pad.				0.2-0.8' Brown	sand and gravel (FILL), moist, loose, poorly sor	ted, fine to very				
		F		•		coarse.						
							Foundry sand (FILL) with gravel and slag, trace g	rless and orango				
							oundry said (FILL) with graver and stag, trace g	giass and orange				2.1
						brick.						3.1
		0.5-21.0' - 2" diameter, Schedule 40										
		PVC riser.			FILL							
												4.7
	5											
						5.0-7.7' SAA (I	FILL), very moist, very soft.		5-15'		9.5'	
		1 0 16 0' Pontonito annot				5.0-7.7 57.11 (1	ELL), very moist, very sort.		3-13		7.5	
		1.0-16.0' - Bentonite grout.										1.0
												1.0
						7.7-8.7' Gray bi	rown Sandy Clay (CL), very moist, very soft, lov	v plasticity,				
					CL	few ora	ange brown mottling, trace gravel.					0.8
							rown Clayey Sand (SC), very moist, very soft, fir	ne to very coarse,				
					7	trace gr		•				
	10				SC		to yellow orange brown Sand and Gravel (SW),	wet loose poorly				
_	10_						, ,	wet, 100se, poorry				1.5
						sorted,	fine to very coarse, few cobbles, trace silt.					1.5
					SW							
												2.2
												1.6
	15											1.0

Former Simclar - 1784 Stanley Ave., Dayton, OH WELL NO. BNMW-4SD

Total Depth Sheet

35.0 feet 2 of



	Depth		Well /	General						
n feet	in		Boring	Geologic		Sample Description		Drilling Ob		Field
	Feet	Well Installation Notes	Description	n Log			Interval	Blow Counts	Recovery	Screen (ppm
	15				15.0-20.0'	Gray Gravelly Sand (SW), wet, loose, fine to very coarse, poorly sorted,	15-25'		3.0 ft.	
						trace silt.				
		16-19' - Hydrated medium bentonite								8.0
		chips.								
				SW						
										6.7
										0.7
		19-31.5' - Clean No. 5 silica								+
	20	sand.	-							+
-	20_	sanu.	-	-	20.0.25.01					0.0
			-		20.0-25.0'	Gray Silty Gravel (GW), wet, loose, fine to very coarse, poorly sorted,				8.0
						cobbles, pushed boulder which caused very low recovery.				
		21-31' - 2" diameter,	-							-
		Schedule 40 PVC well screen with								
		0.010" factory cut slots.								3.3
			-							
			Ī — I							55.0
	25		T							
			-	GW	25.0-27.0'	Gray Sandy Gravel (GW), wet, loose, fine to very coarse, poorly sorted.	25-35'		11.0 ft.	1
						,,,,,				
			1 -							38.0
			- IIII							30.0
					27.0-31.5'	Gray Sand and Gravel (GW), wet, loose, fine to very coarse, poorly				
					27.0-31.3					+
						sorted, trace limestone cobbles.				160
										16.0
			- -							1
			-							
_	30									ļ
										16.0
		31' - PVC end cap.								
		31.5-35' - Hydrated medium			31.5-33.5'	Brown gray Silty Clay (CL / TILL), slightly moist, very hard, no				1.7
		bentonite chips.		CL/		plasticity, trace very coarse sand and fine gravel.				(31.5-33.5'
		•		TILL						
					33.5-34.5'	Gray brown sand (SW), wet, loose, fine to very coarse, few gravel,				1.9
				SW	33.3-34.3	trace silt.				1.7
	35	Boring terminated at 35'.		ML	34.5-35.0'	Brown gray Sandy Silt (ML), very moist, very soft, some fine sand.				+
	JJ	Doring terminated at 35.		IVIL	34.3-33.0	brown gray baildy Sitt (IVIL), very moist, very sort, some time saild.		I		

		LOCATION SKETCI (NOT TO SCALE)	н				WELL NO. Total Depth Sheet Sheet BNMW-4D 55.0 feet 1 of 3 BURGES Engineers ■ Envi	S & NIPLI onmental Scientis	E sts
							Project: Former Simclar - 1784 Stanley Ave., Dayton, OH Start Drilling: Time: 2:20	om Date: 4.	4/21/2015
							Project No.: 53939 Complete Drilling: Time: 5:00	om Date: 4	4/21/2015
							Logged By: Michael Akins Start Installation: Time: 8:00		4/22/2015
							Drilling Contractor: Cascade Drilling Complete Installation: Time: 9:50		4/22/2015
V	l	Ground Surface Elevation:			745		Driller's Name: Densel	Depth to	
	l	Top of Casing Elevation:		4 .1	745		Drill Rig Type: Sonic Drilling Fluids Used (gal): 50 Date Tir	e Water	Notes
		Elevation Units:	fee	et abo	ve me	ean sea level	Sampling Methods: Core Barrel Borehole Diameter (inches): 6 X / Y Coordinates: North: East:		
Elev.	Depth		V	Vell /		General	Casing Type, Joint Type, and Diameter: 2" diameter, Schedule 40 PVC		
in feet	in			oring		Geologic	Hammer Weight: NA Drop: NA		
amsl	Feet	Well Installation Notes		cripti		Log	Location Description: East edge of property and south of former chemical storage area.		
						ASPHALT	Sample Description Drilling Ob	servations	Sample
	0	Flushmount Well				ASFRALI	Interval Blow C	ounts Recovery C	Collected
			<u>م</u>	_	Δ.		0.0-0.2' Asphalt. 0-5'	5.0 ft.	0.7
		0.0-1.0' - 2' x 2' concrete pad.	Δ Δ		$_{\Delta}^{\triangle}$		0.2-1.0' Brown sand and gravel (FILL), dry, loose, poorly sorted, fine to very		
							coarse, trace cobbles.		
							1.0-6.0' Black foundry sand with gravel (FILL), few slag, trace orange brick,		
							slightly moist, loose.		2.1
		0.5-41.5' - 2" diameter, Schedule 40							
		PVC riser.				FILL			
									*
									0.7
	5								
	_						5-15'	10.0 ft.	
		1.0-36.5' - Bentonite grout.							
							6.0-6.7' Black and dark gray stained sandy clay (FILL), very moist, very soft,		2.7
					ł		trace slag, trace gravel, low plasticity.		
							6.7-9.0' Brown gray Silty Clay (CL), very moist, very soft, low plasticity,		
						\mathbf{CL}	trace sand, trace red mottling.		
									1.3
					ŀ		9.0-10.7' Brown gray Clayey Sand (SC), moist, very soft, some clay, fine to very		
	10					\mathbf{SC}	coarse sand.		
	_								1.6
					ŀ		10.7-11.5' Brown Gravelly Sand (SW), moist, loose, poorly sorted, fine to very		
						\mathbf{SW}	coarse.		
					-		11.5-15.0' Brown Sandy Gravel (GW), wet, loose, fine to very coarse, few sand.		
									1.0
						GW			
						~ 11			
									0.0
	15								0.0

Former Simclar - 1784 Stanley Ave., Dayton, OH WELL NO. BNMW-4D

Total Depth

Sheet

55.0 feet



					1		1			
	Depth		Well /							
in feet	in		Boring			Sample Description		Drilling Ob		Sample
amsl	Feet	Well Installation Notes	Descripti	ion Log			Interval	Blow Counts	Recovery	Collected
	15				15.0-25.0'	SAA (GW), limestone boulder at 17.0'.	15-25'		8.0 ft.	
										11.9
			_							
			-							
			-							
			_							
										16.9
	20			GW						
	_		_							19.7
			-							19.7
			-							
			_							
										21.4
			_							
										25.3
	25									25.3
_	25_		_							
			_		25.0-29.0'	Gray Gravelly Sand (SW), wet, loose, poorly sorted, fine to very coarse,	25-35'		10.5 ft.	
						trace silt.				
										32.5
				SW						
			-	2						
			- 1							(2.2
			-							63.3
			_							
			_	GW	29.0-30.0'	Gray Sandy Gravel (GW), wet, loose, trace limestone boulder at 30'.				
	30			0,,,						
					30.0-32.0'	Gray Gravelly Sand (SW), wet, loose, poorly sorted, fine to very coarse.				68.8
				GWY.						
				SW						
			-		22.0.25.01	D G'1 G1 (G1 (THI) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				15.2
					32.0-35.0'	Brown gray Silty Clay (CL / TILL), dry, very hard, no plasticity, few fine				15.2
						to very coarse sand, trace gravel.				
				CL / TILL						
	35									

Former Simclar - 1784 Stanley Ave., Dayton, OH WELL NO. BNMW-4D

Total Depth

Sheet

55.0 feet



Elev.	Depth		Well /	General						
in feet	in		Boring	Geologic		Sample Description		Drilling Ob	servations	Sample
amsl	Feet	Well Installation Notes	Description	Log			Interval	Blow Counts	Recovery	Collected
	35				35.0-37.6'	SAA (CL / TILL), slightly moist, trace limestone cobbles.	35-45'		16.0 ft.	1.8
										(35-36')
										2.8
		36.5-39.5' - Hydrated medium								
		bentonite chips.								
		bentonte emps.		CL / TILL	37 6-41 7'	SAA (CL / TILL), gray, dry, very hard, no plasticity.				
				CE, TIEE	37.0 11.7	Star (CE) riddy, gray, ary, very mard, no passionery.				1.6
			-							1.0
			-							
	40	20 5 44 01 Class No. 5 silica	-							
_	40_	39.5-44.0' - Clean No. 5 silica								
		sand.								
		41.5-43.5' - 2" diameter,	_							
		Schedule 40 PVC well screen with			41.7-42.5'	Gray brown Sand (SW), wet, loose, fine to very coarse, poorly sorted,				12.1
		0.010" factory cut slots.		SW		trace fine gravel.				(41.7-42.5')
					42.5-45.0'	Gray Shale (SH), dry, very hard, highly weathered, few fine sand, trace				0.4
		43.5' - PVC end cap.				limestone.				(42.5-44.0')
		44-55' - Hydrated medium								0.6
	45	bentonite chips.								
					45.0-55.0'	SAA (SH), with trace gray limestone interbedding. Limestone contains	45-55'		10.0 ft.	
						many shell fossils (brachiopods).				
										0.1
				SH						
			_	511						0.2
			-							0.2
	50		_							
_	50_		-							
										0.6
										0.1
								1		0.4
	55				Roring terr	ninated at 55 feet below ground surface.				(54-55')

		LOCATION SKETCH	I						_			Ecc (
		(NOT TO SCALE)				WELL NO.		BNMW-5					& NIP	
						Total Depth		21.5 feet		E	ngineers =	ı Environm	ental Scie	ntists
						Sheet		of	2	-				
						Desires	E	St 1794 St 1		Comp D. III.	T	10.55	Ditti	4/15/2015
						Project: Project No.:	53939	Simclar - 1784 Stanley Ave., Da	iyton, OH	Start Drilling: Complete Drilling:	Time:	10:55am 11:25am	Date:	4/15/2015 4/15/2015
						Logged By:	Michael A	Akins		Start Installation:	Time:	11:30am	Date:	4/15/2015
						Drilling Contra		Wright's Drilling		Complete Installation:	Time:	12:10pm	Date:	4/15/2015
. ↑		Ground Surface Elevation:		746	5.56	Driller's Name	e:	Brian, Densil, and Jason Wri	ght				Depth to	
- 17	1	Top of Casing Elevation:		746	5.13	Drill Rig Type	e:	CME 75	Drilling Flui	ds Used (gal): 0	Date	Time	Water	Notes
- 1		Elevation Units:	feet a	above m	nean sea level	Sampling Meth		2" x 2' SS Split-Spoon	Borehole Dian					
					г .	X / Y Coordina		North:	East:					
Elev.	Depth			ell /	General	Casing Type, J			Schedule 40 PVC					
in feet amsl	in Feet	Well Installation Notes		ring ription	Geologic Log	Hammer Weigi Location Descri		140 lbs. Northeast of former chemica	Drop:	30" Auto Hammer				
anisi	reet	wen instanation Notes	Desci	триоп		Location Desci	лірион.	Sample Descrip		eastern property line.	Dr	rilling Observatio	ns	Field
	0	Flushmount Well			ASPHALT			Sumpre Descrip			Interval	Blow Counts	Recovery	Screen (ppm)
		8" diameter steel protector.	^		3	0.0-0.2'	Asphalt.				0-2'	3-6-7-3	1.7 ft.	6.0
		^				0.2-0.6'		ray sand and gravel (FILL), dr	v loose		-			
		oto 110 2 x 2 concrete paul				0.6-2.0'		undry sand (FILL), slightly mo		oft trace slag				
		1.0-7.5' - Bentonite grout.				0.0 2.0	trace grav		, 1005C, VELY 5	ort, trace stag,				
		1.0-7.5 - Bentonne grout.				2.0-4.0'		LL), some slag, trace orange b	riok traca glass	slightly moist loosa/soft	2-4'	3-8-8-5	1.6 ft.	33.0
		0.5-11.5' - 2" diameter, Schedule 40				2.0-4.0	заа (гп	LL), some stag, trace orange o	iick, trace giass,	slightly moist, loose/soft.	2-4	3-0-0-3	1.0 11.	33.0
		PVC riser.												
					FILL									
						4.0-6.0'	SAA (FII	LL), moist, trace slag.			4-6'	6-4-6-6	2.0 ft.	26.4
_	5													
						6.0-7.0'	Black for	undry sand (FILL), moist, very	soft, trace slag,	trace glass.	6-8'	2-2-1-5	2.0 ft.	1.0
					SC	7.0-7.7'	Dark oliv	ve gray Clayey Sand (SC), ver	y moist, very sof	t, fine to very				
		7.5-9.5' - Medium bentonite chips			SW		coarse sa	and, trace red brown mottling.	-	j				
		hydrated with potable water.				7.7-8.0'	Brown G	Gravelly Sand (SW), slightly m	oist, loose, poorl	v sorted, fine	8-10'	0-1-2-4	0.9 ft.	1.0
		,			CL		to very co		, , , , , , , , , , , , , , , , , , ,	J		-		
					SC	8.0-9.0'		ve Gray Silty Clay (CL), moist	very soft low r	lasticity trace				
	10	9.5-21.5' - Clean No. 5 silica			50	0.0 7.0		n mottling.	, very sort, row p	nasticity, trace				
_		sand. 3 (100 lbs.) bags.				9.0-9.5'		ray Clayey Sand (SC), wet, loo	osa/soft poorly s	pertod fine to yeary	10-12'	7-8-12-12	0.8 ft.	2.5
		said. 5 (100 lbs.) bags.			SW	9.0-9.3		ome clay.	ose/sort, poorry s	orted, fine to very	10-12	7-0-12-12	0.6 1t.	2.3
		11.5-21.5' - 2" diameter,				9.5-10.0'	Brown G	Gravelly Sand (SW), dry, loose	, poorly sorted, f	ine to very coarse.				
		Schedule 40 PVC well screen with	-	-		10.0-12.0'	SAA (SV	W), gray brown color, trace gra	y limestone cobl	bles.				
		0.010" factory cut slots.		_	SM	12.0-12.4'	Brown gr	ray Silty Gravelly Sand (SM),	wet, very soft, fi	ne to very coarse	12-14'	3-5-4-4	1.3 ft.	1.7
			-	-			sand, fine	e to coarse gravel, few silt.						
			-	-		12.4-14.0'		ray Gravelly Sand (SW), wet,	loose, fine to ver	y coarse, poorly				
					SW			race limestone cobbles.						
						14.0-16.0'		W), light gray brown with trace	e limestone cobb	les, wet, loose,	14-16'	5-11-10-14	1.5 ft.	2.1
	15		-	-			trace silt.							

WELL NO.

BNMW-5

Total Depth Sheet 21.5 feet

of <u>2</u>



Elev.	Depth		Well /	General					
in feet	in		Boring	Geologic	Sample Description		Drilling Ob	servations	Field
amsl	Feet	Well Installation Notes	Description	Log		Interval	Blow Counts	Recovery	Screen (ppm)
	15]						
			T						
			TIIIII	sw	16.0-17.6' SAA (SW), wet.	16 10!	3-12-9-8	1.5 ft.	1.6
			┨	SW	16.0-17.6' SAA (SW), wet.	16-18'	3-12-9-8	1.5 π.	1.6
			_						
			_		17.6-18.0' Brown Sand (SP), wet, loose/very soft, well sorted fine sand.				
			T – I		18.0-20.0 SAA (SP), brown, wet.	18-20'	0-3-6-8	1.2 ft.	2.0
			- IIII - IIII	SP	Diff (b) , blown, wet	10 20	0000	1.2 10	2.0
				Sr					
			_						
_	20								
					20.0-21.5' Gray Brown Sand (SW), wet, loose, fine to medium sand, trace coarse	20-22'	4-9-9	1.5 ft.	2.7
			T – I	SW	sand, poorly sorted.				
		21.5' - PVC end cap.	-	5,,	suid, poorly sorted.				
		21.5 - F VC end cap.							
					Boring terminated at 21.5 feet below ground surface.				
	25								
			-						
			-						
			_						
				[
			7						
			1	1					
			1	[+		
	2.0		-	[
_	30		4						
				1					
			7						
			1	1			+		
			-	1					
			_						
				[1		
				1					
			1	1					
			+	1		1	+		
			4	1		1	-		
	35			l		1			

						1									
		LOCATION SKETCI	H										ECC 9	o Milo	
		(NOT TO SCALE)				WELL NO.		BNMW-5I)			BURG	E99 (SK INIP	LE
						Total Depth		30.0 feet	c	2		Engineers =	Environn	nental Scie	ntists
						Sheet		1	of .	2					
						Project:	Former Si	imclar - 1784 Stanley Av	e., Dayt	on, OH	Start Drilling:	Time:	8:45am	Date:	4/23/2015
						Project No.:	53939				Complete Drilling:	Time:	9:10am	Date:	4/23/2015
						Logged By:	Michael Ak				Start Installation:	Time:	9:12am	Date:	4/23/2015
	•	Ground Surface Elevation:		746	5.51	Drilling Contra Driller's Name		Cascade Drilling Densel			Complete Installation:	Time:	9:40am	Date:	4/23/2015
	l	Top of Casing Elevation:		746		Drill Rig Type		Sonic		Drilling Flui	ds Used (gal): 50	Date	Time	Water	Notes
·	Ι'	Elevation Units:			ean sea level	Sampling Metl		Core Barrel		Borehole Dian		Dute	11110	· · · · · ·	110105
						X / Y Coordina	nates:	North:	-	East:					
Elev.	Depth		Well /	/	General	Casing Type, J	Joint Type, an		neter, Sc	hedule 40 PVC					
in feet			Boring	_	Geologic	Hammer Weig		NA		Drop:	NA				
amsl	Feet	Well Installation Notes	Descripti	tion	Log	Location Desc	cription:	Northeast of former ch Sample Do			eastern property line.	D	illing Observation	<u></u>	Field
	0	Flushmount Well			ASPHALT			Sample D	escripuo	11		Interval	Blow Counts	Recovery	Screen (ppm)
	1 ~	8" diameter steel protector.	^ _	ΔΔ.	3	0.0-0.2'	Asphalt.					0-5'		6.0 ft.	1.6
		0.0-1.0' - 2' x 2' concrete pad.	۵ ۵	Δ		0.2-1.0'		nd and gravel (FILL), di	ry loose	noorly sorted	I fine to very			0.0 1	1.0
		0.0-1.0 - 2 x 2 concrete pad.		_		0.2-1.0	coarse.	ind and graver (1 ILL), di	y, 1003C	, poorty sortec	i, thie to very				
						1.0-5.0'		ndry sand (FILL), moist	VOTV C	oft trace grave	l clag orange				
						1.0-3.0	brick, and		., very so	nt, trace grave	i, siag, orange				6.0
		0.5-20.0' - 2" diameter, Schedule 40			FILL		brick, and	wood.							0.0
		,			FILL										
		PVC riser.													
															2.0
	_														3.9
_	5_						G					- 1-F1		500	
		1015015				5.0-6.5'	SAA (FILI	L), very moist.				5-15'		7.0 ft.	
		1.0-15.0' - Bentonite grout.													1.2
						6 5 7 51	D 1	G 1 GL (GL)			C* 1*				1.3
						6.5-7.5'		Sandy Clay (CL), very			fine to medium				
					CT			plasticity, trace white s							
					CL	7.5-9.5'	SAA (CL)), gray brown, trace red	mottling	ÿ.					
															1.1
	40				9.0										
_	10_				SC	9.5-10.0'		ayey Sand (SC), very m	oist, vei	y soft, fine to	very coarse,				
							trace grave								1.2
					SW	10.0-11.5'		nd (SW), wet, loose, po	orly sor	ted, fine to ver	y coarse, trace				
							_	d white snail shells.							
						11.5-15.0'		ay Sandy Gravel (GW),	wet, loc	se, poorly sort	ed, fine to very				
							coarse, fev	w cobbles.							1.3
					GW										
															1.2
	15					1									(14-15')

Former Simclar - 1784 Stanley Ave., Dayton, OH WELL NO. BNMW-5D

Total Depth Sheet

30.0 feet 2____



		I	1		1		Т			
	Depth		Well /	General						
in feet	in		Boring			Sample Description		Drilling Ob		Field
amsl	Feet	Well Installation Notes	Description	on Log	1		Interval	Blow Counts	Recovery	Screen (ppm)
	15	15-18' - Hydrated medium bentonite			15.0-25.0'	No recovery. Driller stated they pushed a boulder with the core barrel.	15-25'		0.0 ft.	
		chips.				Geology Log inferred from nearby soil boring BNMW-5 ABANDONED,				
				GW		which is located approximately 8 feet east of BNMW-5.				
		18-30' - Clean No. 5 silica								
			-	sw						
		sand.	-	SW SW						
			_							
_	20_									
		20-30' - 2" diameter,	-							
		Schedule 40 PVC well screen with	_							
		0.010" factory cut slots.	T							
		, , , , , , , , , , , , , , , , , , , ,	T							
			- I							
			-							
				~						
			<u> </u>	GW						
	25									
			- I		25.0-28.0'	Brown gray Silty Sandy Gravel (GW), wet, loose, grades fine to coarse	25-30'		2.5 ft.	1.7
			T			with depth.				
			1			•				3.2
			-							5.2
			_							
			-							
			-		28.0-30.0'	Brown gray Silty Sandy Gravel (GP), wet, loose, little to some silt, very				2.8
			-	GP		coarse gravel, cobbles and boulders at 30'.	1	ļ		
				J.						
	30_									
		30' - PVC end cap.			Boring tern	ninated at 30.0 feet below ground surface.				
			1							
			1				1	<u> </u>		
			1							
			1							
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			4				+	-		
			4				1	ļ		
	35									
					1		1	1	1	

		LOCATION SKETCI (NOT TO SCALE)	Н		WELL NO. Total Depth Sheet		42.0 feet	5D - ABANI of 3	OONED	BUI Engine	R G ers ■	ESS Environm	& NIP nental Scier	LE ntists
					Project:	Former S	Simclar - 1784 Stanley A	ve., Dayton, OH	Start Drilling:		Time:	2:15pm	Date:	4/22/2015
					Project No.:	53939			Complete Drilling	;	Time:	4:30pm	Date:	4/22/2015
					Logged By:	Michael A	Akins		Start Installation:		Time:	7:45am	Date:	4/23/2015
					Drilling Contr	ractor:	Cascade Drilling		Complete Installa	tion:	Time:	8:30am	Date:	4/23/2015
	1	Ground Surface Elevation:			Driller's Name		Densel						Depth to	
	1	Top of Casing Elevation:			Drill Rig Type		Sonic		Fluids Used (gal):	50 Da	te	Time	Water	Notes
		Elevation Units:	feet above n	nean sea level	Sampling Me		Core Barrel		Diameter (inches):	6				
		1	1	1	X / Y Coordin				East:					
Elev.	Depth		Well /	General				meter, Schedule 40						
in feet	in		Boring	Geologic	Hammer Wei	~	NA	Drop:	NA					
amsl	Feet	Well Installation Notes	Description	Log	Location Des	cription:			near eastern property l	ine.				
				ASPHALT			Sample D	escription		_		illing Observatio		Sample
_	0_		^							Inter		Blow Counts	Recovery	Collected
					0.0-0.2'	Asphalt.				0-	6'		7.0 ft.	0.2
		0.0-1.0' - Concrete patch.			0.2-1.0'	Brown s	and and gravel (FILL), d	lry, loose, poorly s	orted.					
					1.0-6.0'	Black fo	undry sand (FILL), mois	st, loose, fine sand	few slag, trace					
		1.0-42.0' - Bentonite grout.				gravel, o	range brick, wood, and	glass.						
														28.9
			-											
			-	FILL										
			-	1122										
			-											17.4
	5		-											17.4
_) ³ —		-											
			-											
			-											
			-		6.0-7.0'	SAA (FI	LL), very moist, very so	ft.		6-1	5'		8.0 ft.	1.3
			-		5 0 40 51	- ·	a 1 at (at)							
			-		7.0-10.5'		own Sandy Clay (CL), ve	· · · · · ·	, some fine to very					
			=			coarse sa	and, few dark gray clay o	liscoloration.						
														1.0
			-	CL										
	10													
														1.2
			-		10.5-12.0'	Brown C	Gravelly Sand (SW), moi	st to very moist, lo	ose, poorly sorted.					
			-				ery coarse, few cobbles.	<u>, ,</u>	, , , , , , , , , , , , , , , , , , ,					
			-			Time to v	ery course, rew cocores.							
					12.0-15.0'	S Δ Λ (S1	W), brown gray, wet, loo	se noorly corted	fine to very coarse					0.8
			-	sw	12.0-13.0	,	and white snail shells.	se, poorty sorted,	inc to very coarse,					0.0
			-	500		uace sill	and withe shall shells.							
			-											
														0 -
	15													0.8
	1 15	1		1	1					1				

WELL NO.

BNMW-5D - ABANDONED

Total Depth Sheet 42.0 feet



	Depth		Well /	General				D 1111 OI		0 1
in feet	in	W. II I. at all at a Nation	Boring	Geologic Log		Sample Description	T1	Drilling Obs		Sample Collected
amsl	Feet 15	Well Installation Notes	Description	Log	15.0-18.0'	Boulders (GW), wet, loose, few sand and gravel, limestone and granite.	Interval 15-20'	Blow Counts	Recovery 5.0 ft.	Collected
	13		+		13.0-18.0	Boulders (Gw), wet, loose, lew saild and graver, fillestone and granite.	13-20		3.0 II.	
			-							1.1
			-	GW						1.1
			-	"						
			-							
			-		18.0-20.0'	Oranga huayin Sand (SW) wat loose fine to your against trace silt				0.7
			-		18.0-20.0	Orange brown Sand (SW), wet, loose, fine to very coarse, trace silt.				0.7
			-	SW						
	20		_							
_	20		-	-	20.0.25.01		20.251		5.0.6	2.2
			-		20.0-25.0'	Orange brown Sandy Gravel (GW), wet, loose, fine to very coarse,	20-25'		5.0 ft.	3.2
			-			poorly sorted, trace silt.				
			-					1		
			-	CIVI						•
			4	GW						2.9
			-							
			4					-		
			4							
	25		_							3.3
_	25		4							(24-25')
			_		25.0-30.0'	Brown Gravelly Sand (SW), wet, loose, fine to very coarse, some fine	25-30'		5.0 ft.	6.4
			_			gravel, trace silt, boulder at 30'.				(25-28')
				SW						
										6.7
	30									
					30.0-32.0'	Gray Silty Clay (CL / TILL), dry, very hard, no plasticity, trace gravel,	30-34'		5.0 ft.	0.8
				CL / TILL		trace limestone which contains shell fossils.				
					32.0-34.0'	Gray Shale (SH), dry, very hard, highly weathered.				0.6
				SH						
					34.0-42.0'	SAA (SH), dry, highly weathered, trace limestone interbedding.	34-42'		9.0 ft.	
	35									

WELL NO.

BNMW-5D - ABANDONED

Total Depth Sheet 42.0 feet



						r			
Elev.	Depth		Well /	General					
in feet	in		Boring	Geologic	Sample Description		Drilling Ob	servations	Sample
amsl	Feet	Well Installation Notes	Description	Log		Interval	Blow Counts	Recovery	Collected
	35								
				SH					
	40								
_	40								
					D				
					Boring terminated at 42 feet below ground surface.				
	45								
I _	50_								
			1						
	55						l		

		LOCATION SKETCI (NOT TO SCALE)	H				WELL NO. Total Depth	BNMW-6 20.0 feet		BURG	ESS 8	& NIP	PLE prints
							Sheet	1 of 2	_	.ngmeers -	LIIVIIOIIII	ientai Scie	IIIIsts
							Project: Forme	r Simclar - 1784 Stanley Ave., Dayton, OH	Start Drilling:	Time:	9:00am	Date:	4/24/2015
							Project No.: 53939		Complete Drilling:	Time:	9:20am	Date:	4/24/2015
							Logged By: Michae	el Akins	Start Installation:	Time:	9:30am	Date:	4/24/2015
							Drilling Contractor:	EnviroCore, Ltd.	Complete Installation:	Time:	11:15pm	Date:	4/24/2015
		Ground Surface Elevation:			744	.96	Driller's Name:	Jerry and Collin				Depth to	
		Top of Casing Elevation:			744	.63	Drill Rig Type:		Fluids Used (gal): 0	Date	Time	Water	Notes
'		Elevation Units:	fee	et abo	ove m	ean sea level	Sampling Methods:		iameter (inches): 8.25	ļ			
							X / Y Coordinates:		ast:				
Elev.	Depth			Well		General	Casing Type, Joint Type						
in feet	in			Boring	_	Geologic	Hammer Weight:	NA Drop:	NA	-			
amsl	Feet	Well Installation Notes	Des	script	tion	Log	Location Description:	Southwest corner of former plating room in	side the building.				FI 11
	0	Flushers and Wall						Sample Description			rilling Observatio		Field
_	U_	Flushmount Well	<u>م</u> م		T .△	~~	0.0051.55			Interval	Blow Counts	Recovery	Screen (ppm)
					ا ۵		0.0-0.5' - Concrete.			0-5'		3.0 ft.	2.8
		0.0-1.0' - 2' x 2' concrete pad.					0.5-4.0' - Brown clay	with few sand and trace gravel and cobbles (F	ILL), slightly moist,				
							firm to soft, no plastic	ity, trace metal piece at 3.0'.					
		0.5-19.0' - 2" diameter, Schedule 40											
		PVC riser.				FILL							3.1
		1.0-5.0' - Medium bentonite chips.											
		1.0-3.0 - Medium bentonne emps.											
	_						-	own Silty Clay (CL), slightly moist, hard, no	olasticity.				2.0
_	5_						4.5-5.0' - SAA (CL), b						
		5.0-7.0' - Medium bentonite chips					5.0-9.2' - Brown Sand	y Clay (CL), slightly moist to moist with dept	n, some fine sand,	5-9'		4.0 ft.	
		hydrated with potable water.					no plasticity, trace wh	ite snail shells.					
						\mathbf{CL}							2.0
		7.0-10.0' - Clean No. 4 silica											
		sand.											
													2.1
			-										
				_			9.2-10.0' - Gray brown	n Clayey Gravelly Sand (SC), moist, soft, few	clay, fine to very	9-13'		3.2 ft.	
	10			_		SC	coarse sand, fine to co	parse gravel, trace silt.					
		10.0-20.0' - Heaving sand.		-			10.0-13.0' - Gray brov	vn Gravelly Sand (SW), wet, loose, poorly sor	ted, fine to very				1.7
		S		-			coarse, fine to coarse	* ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	<u> </u>				
		9.0-19.0' - 2" diameter,		-				B					
		Schedule 40 PVC well screen with		-									
				-		CNN							1.5
		0.010" factory cut slots.		-		SW							1.5
				_									
				_			13.0-17.0' - SAA (SW), brown, wet, trace limestone cobbles, trace s	ilt.	13-17'		3.5 ft.	
				_									
				-									1.2
	15			-									

WELL NO.

BNMW-6

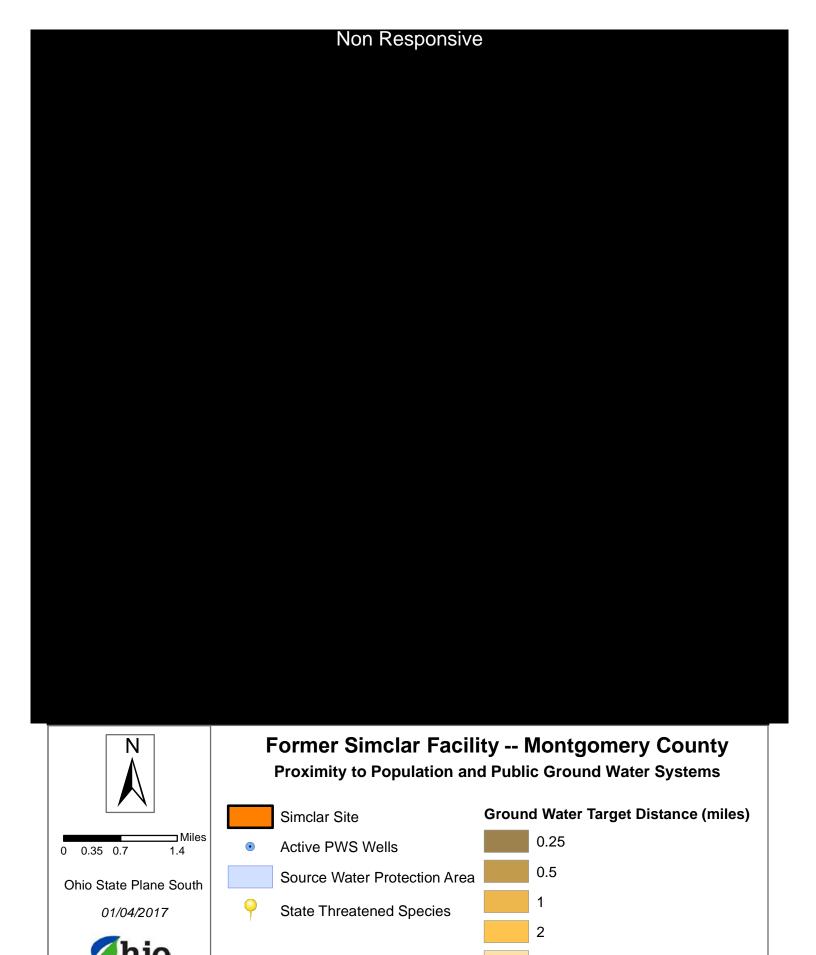
Total Depth Sheet 20.0 feet 2 of 2



Elev.	Depth		Well /	General					
in feet	in		Boring	Geologic	Sample Description		Drilling Ob		Field
amsl	Feet	Well Installation Notes	Description	Log		Interval	Blow Counts	Recovery	Screen (ppm)
	15								
			_						
	l		-						1.0
							 		1.0
				SW	17.0-18.0' - SAA (SW), wet, some gravel.	17-20'		3.0 ft.	
				SW	17.0-18.0 - SAA (SW), wet, some gravel.	17-20		3.0 π.	
							ļ		
					18.0-19.0' - SAA (SW), wet, gray brown color.				4.0
		19.0' - PVC end cap.							
					19.0-20.0' - SAA (SW), wet, orange brown color.				
	20				<u> </u>				
					Boring terminated at 20 feet below ground surface.				
	ŀ				boring terminated at 20 feet below ground surface.				
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lacksquare					I.				1

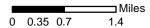
Appendix D

Target Distance Maps and Tables









Ohio State Plane South 01/04/2017



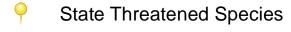
Former Simclar Facility -- Montgomery County

Natural Heritage Data and Surface Water Systems





Surface Water Target Distance Limit



Population Data

RADIUS (MILES)	TOTAL	WHITE	BLACK	INDIAN	ASIAN	HAWAIIAN	OTHER
0.00-0.25	27	25	0	0	0	0	1
0.25-0.50	658	593	45	0	2	0	2
0.50-1.0	5,006	4,229	520	8	37	7	74
1.0-2.0	28,761	13,244	13,876	90	174	14	385
2.0-3.0	48,416	26,016	19,560	137	302	16	939
3.0-4.0	63,476	37,032	23,115	164	696	29	640
TOTAL	146,344	81,139	57,117	399	1,211	66	2,041

Total Population within 1-mile Radius:

5,691

Active Surface Water Intakes

MAP ID	SYSTEM ID	SYSTEM NAME	WATER BODY	LINEAR DISTANCE (MILES)	POPULATION SERVED
		NONE			

Active Ground Water System Wells

MAP ID	SYSTEM ID	SYSTEM NAME and SYSTEM WELL NAME TYPE		LINEAR DISTANCE (MILES)	POPULATION SERVED
1	OH5703512	Dayton Public Water System Dayton City - Miami PI - Well 014r 0.872		142,000	
2	OH5703512	Dayton P.W.S Miami PI Well 012r	Dayton P.W.S Miami PI		Counted under #1
3	OH5703512	Dayton P.W.S Miami PI Well 015r	Community	1.001	Counted under #1
4	OH5703512	Dayton P.W.S Miami PI Well 010r	Community	1.026	Counted under #1
5	OH5703512	Dayton P.W.S Miami PI Well 00i2	Community	1.126	Counted under #1
6	OH5703512	Dayton P.W.S Miami PI Well 011r Community 1.171		Counted under #1	
7	OH5703512	Dayton P.W.S Miami PI Well 00i5 Community		1.295	Counted under #1
8	OH5703512	Dayton P.W.S Miami PI Well 009r Community 1.		1.300	Counted under #1
9	OH5703512	Dayton P.W.S Miami PI Well 00i1 Community 1.300		Counted under #1	
10	OH5703512	Dayton P.W.S Miami Pl		1.365	Counted under #1
11	OH5703512	Dayton P.W.S Miami Pl Well 0037	Dayton P.W.S Miami PI Community 1 423		Counted under #1
12	OH5703512	Dayton P.W.S Miami Pl		1.440	Counted under #1
13	OH5703512	Dayton P.W.S Miami Pl		1.462	Counted under #1
14	OH5703512	Dayton P.W.S Miami Pl Well 016r	Community	1.471	Counted under #1
15	OH5703512	Dayton P.W.S Miami Pl Well 0013	Community	1.485	Counted under #1
16	OH5703512	Dayton P.W.S Ottawa PI Well 0049	Community 1.510		Counted under #1

MAP	SYSTEM	SYSTEM NAME and	SYSTEM	LINEAR	POPULATION
ID	ID			DISTANCE	SERVED
		Dayton P.W.S Miami Pl			Counted
17	OH5703512	Well 0021	Community	1.548	under #1
18	OH5703512	Dayton P.W.S Miami Pl	Community	1.554	Counted
10	OU2/02217	Well 0030	Community	1.554	under #1
19	OH5703512	Dayton P.W.S Ottawa PI	Community	1.575	Counted
	0113703312	Well 0048	Community	1.3/3	under #1
20	OH5703512	Dayton P.W.S Miami Pl	Community	1.583	Counted
		Well 019			under #1
21	OH5703512	Dayton P.W.S Miami Pl	Community	1.584	Counted
		Well 0007	<u>-</u>		under #1
22	OH5703512	Dayton P.W.S Miami Pl Well 018r	Community	1.630	Counted
		Dayton P.W.S Miami Pl			under #1 Counted
23	OH5703512	Well 0029	Community	1.636	under #1
_		Dayton P.W.S Miami Pl			Counted
24	OH5703512	Well 0022	Community	1.654	under #1
	0115565545	Dayton P.W.S Miami Pl	0	4.67.	Counted
25	OH5703512	Well 0006	Community	1.674	under #1
20	OUE702E42	Dayton P.W.S Miami Pl	Community	1 (05	Counted
26	OH5703512	Well 0031	Community	1.685	under #1
27	OH5703512	Dayton P.W.S Miami Pl	Community	1.710	Counted
	OU2/02217	Well 0032	Community	1./10	under #1
28	OH5703512	Dayton P.W.S Miami Plant	Community	1.745	Counted
	J1137 UJJ12	Well 002r (WELL_NUM 38077)		1.743	under #1
28	OH5703512	Dayton P.W.S Miami Plant	Community	1.745	Counted
		Well 002F (WELL_NOW 13880)		1.743	under #1
29	OH5703512	Dayton P.W.S Miami Pl Well 0028 Community		1.784	Counted
		Dayton P.W.S Miami Pl		1.837	under #1 Counted
30	OH5703512	•	Well 0033 Community		under #1
		Dayton P.W.S Miami Pl			Counted
31	OH5703512	Well 0027	Community	1.916	under #1
22	0115702542	Dayton P.W.S Miami PI	- 4.000		Counted
32	OH5703512	Well 0023	Community	1.926	under #1
33	OH5703512	Dayton P.W.S Ottawa PI	Community	1 052	Counted
33	OU2/02217	Well 0046	Community	1.953	under #1
34	OH5703512	Dayton P.W.S Miami Pl	Community	1.962	Counted
	0113703312	Well 034		1.302	under #1
35	OH5703512	Dayton P.W.S Miami Pl	Community	1.976	Counted
		Well 0003			under #1
36	OH5746012	First Dayton Free Will Baptist	Non-Community	1.988	30
		Well 0002			
37	OH5703512	Dayton P.W.S Ottawa Pl	Community	2.004	Counted
		Well 0045			under #1 Counted
38	OH5703512	Dayton P.W.S Miami Pl Well 0024 Community		2.025	under #1
		Dayton P.W.S Miami Pl			Counted
39	OH5703512	2 Dayton P.W.S Miami Pl Commun Well 0001		2.046	under #1
	AU =	Dayton P.W.S Ottawa Pl			Counted
40	OH5703512	Well 0044	Community	2.057	under #1
	0115702542	Dayton P.W.S Miami PI	1		Counted
41	OH5703512	Well 035	Community	2.082	under #1

MAP	SYSTEM	SYSTEM NAME and	SYSTEM	LINEAR	POPULATION
ID	ID	WELL NAME	TYPE	DISTANCE	SERVED
		Dayton P.W.S Miami Pl			Counted
42	OH5703512	Well 0025	Community	2.110	under #1
43	OH5703512	Dayton P.W.S Ottawa PI	Community	2.133	Counted
45	ОП3/03312	Well 0042		2.133	under #1
44	OH5703512	Dayton P.W.S Ottawa PI	Community	2.165	Counted
77	0113703312	Well 0043	Community	2.103	under #1
45	OH5703512	Dayton P.W.S Miami PI	Community 2.197		Counted
	0110700012	Well 0026			under #1
46	OH5703512	Dayton P.W.S Miami Pl	Community	2.245	Counted
		Well 004r			under #1
47	OH5703512	Dayton P.W.S Miami Pl Well 0036	Community	2.258	Counted
		Dayton P.W.S Ottawa PI			under #1 Counted
48	OH5703512	Well 0007	Community	2.306	under #1
		Dayton P.W.S Ottawa Pl			Counted
49	OH5703512	Well 0008	Community	2.374	under #1
	0115703543	Dayton P.W.S Ottawa PI	0	2.424	Counted
50	OH5703512	Well 0009	Community	2.431	under #1
51	OH5703612	Huber Heights Public Water System	Community	2.793	20 270
21	OH3/03012	Plant 1 Well 0005	Community	2.793	38,278
52	OH5703512	Dayton P.W.S Ottawa PI	Community	2.814	Counted
<i>32</i>	0113703312	Well 003r	- Community	2.014	under #1
53	OH5703512	Dayton P.W.S Ottawa Pl	Community	2.833	Counted
		Well 063			under #1
54	OH5703612	Huber Heights Public Water System Community		2.848	Counted
		Plant 1 Well 0004 Old Troy Pike Community Church			under #51
55	OH5734812	Well 0001 Non-Community		2.874	40
		Brantwood Bantist Church P.W.S			
56	OH5749112			2.896	150
	0115700640	Huber Heights Public Water System		2.000	Counted
57	OH5703612	Plant 1 Well 0003	Community	2.908	under #51
го	0115703543	Dayton P.W.S Ottawa PI	Community	2.022	Counted
58	OH5703512	Well 0002	Community	2.923	under #1
59	OH5703612	Huber Heights Public Water System	Community	2.938	Counted
39	OH3703012	Plant 1 Well 0007	Community	2.936	under #51
60	OH5703612	Huber Heights Public Water System	Community	2.944	Counted
	0110700012	Plant 1 Well 0006			under #51
61	OH5703612	Huber Heights Public Water System	Community	2.952	Counted
			Plant 1 Well 0001		under #51
62	OH5703512	Dayton P.W.S Ottawa PI Well 04-2 Community		3.039	Counted under #1
		Well 01r2 Dayton P.W.S Ottawa PI			Counted
63	OH5703512	Well 061	Community	3.068	under #1
-	A.	Dayton P.W.S Ottawa Pl	•		Counted
64	OH5703512	OH5703512 Well 0017 Community		3.074	under #1
6 F	0115703543	Dayton P.W.S Ottawa Pl	Committee	2.400	Counted
65	OH5703512	Well 0006	Community	3.166	under #1
66	OH5703512	Dayton P.W.S Ottawa PI	Community	2 100	Counted
00	ОПЭ/03312	Well 060	Community	3.198	under #1
67	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.211	Counted
0,	J.137 03312	Well 0018	y	J.211	under #1

MAP	SYSTEM	SYSTEM NAME and	SYSTEM	LINEAR	POPULATION
ID	ID	WELL NAME TYPE		DISTANCE	SERVED
		Dayton P.W.S Ottawa Pl			Counted
68	OH5703512	Well 004r	Community	3.218	under #1
69	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.305	Counted
09	OU2/02217	Well 0031	Community	3.303	under #1
70	OH5703512	Dayton P.W.S Ottawa PI	Community	3.316	Counted
	3113703312	Well 0050	3.310		under #1
71	OH5703512	Dayton P.W.S Ottawa PI	Community	3.348	Counted
	J, 30012	Well 005r			under #1
72	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.349	Counted
		Well 0013			under #1
73	OH5737112	Voiture 40-8, 34	Non-Community	3.353	25
		Well 0001 Dayton P.W.S Ottawa Pl			Counted
74	OH5703512	Well 0010	Community	3.380	under #1
		Dayton P.W.S Ottawa Pl			Counted
75	OH5703512	Well 0014	Community	3.387	under #1
7.	0115763543	Dayton P.W.S Ottawa Pl	0	2.424	Counted
76	OH5703512	Well 0012	Community	3.434	under #1
77	OUE702F12	Dayton P.W.S Ottawa Pl	Community	2 450	Counted
77	OH5703512	Well 034r	Community	3.450	under #1
78	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.495	Counted
	3113703312	Well 0015	- Januarity	J.7JJ	under #1
79	OH5703512	Well 0051		3.511	Counted
					under #1
80	OH5703512	•	Dayton P.W.S Ottawa PI Community		Counted
		Well 0011 Dayton P.W.S Ottawa Pl		3.528	under #1 Counted
81	OH5703512	Well 035b	Community	3.567	under #1
		Fair Valley Country Club			150
82	OH5744312	Well 0001	Non-Community	n-Community 3.580	
	0115565545	Dayton P.W.S Ottawa Pl			Counted
83	OH5703512	Well 0036	Community	3.591	under #1
0.4	0115703543	Dayton P.W.S Ottawa Pl	Com/!!	2.642	Counted
84	OH5703512	Well 0016	Community	3.613	under #1
85	OH5703512	Dayton P.W.S Miami PI	Community	3.631	Counted
00	OU2/02217	Well Rr003	Community	3.031	under #1
86	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.636	Counted
	J1137 UJJ12	Well 0019		<u> </u>	under #1
87	OH5703512	Dayton P.W.S Ottawa PI	Community	3.643	Counted
		Well 0052			under #1
88	OH5703512	•	ayton P.W.S Ottawa Pl		Counted
		Well 0026 Oakwood City P.W.S			under #1
89	OH5701915	Springhouse Plant Well 0s02	Community	3.665	9,202
		Oakwood City P.W.S			Counted
90	OH5701915	Springhouse Plant Well 0s03	Community	3.667	under #89
-		Dayton P.W.S Ottawa Pl		3.680	Counted
91	OH5703512	Well 0027	Community		under #1
02	0115702542	Dayton P.W.S Miami PI	ami Pl		Counted
92	OH5703512	Well 0043	Community	3.684	under #1
02	OUE70101F	Oakwood City P.W.S	Community	2 600	Counted
93	OH5701915	Springhouse Plant Well 0s01	Community	3.688	under #89

1D 94	ID	WELL NAME			
94			TYPE	DISTANCE	SERVED
J -	OH5703512	Dayton P.W.S Ottawa PI	Community	3.710	Counted
	0113703312	Well 0020		3.710	under #1
95	OH5703512	Dayton P.W.S Ottawa PI	Community	3.745	Counted
		Well 028r		<u> </u>	under #1
96	OH5703512	Dayton P.W.S Ottawa PI	Community	3.761	Counted
30	0113703312	Well 0022		3.701	under #1
97	OH5701915	Oakwood City P.W.S.	Community	3.783	Counted
	0113701313	Shafor Rd Plant Well 0f07		3.703	under #89
98	OH5703512	Dayton P.W.S Ottawa PI	Community	3.784	Counted
30	0113703312	Well 0021		3.704	under #1
99	OH5703512	Dayton P.W.S Miami Plant	Community	3.789	Counted
		Well 0042		3.703	under #1
100	OH5703512	Dayton P.W.S Ottawa PI	Community	3.796	Counted
100	0113703312	Well 0053		3.730	under #1
101	OH5703512	Dayton P.W.S Ottawa PI	Community	3.812	Counted
101		Well 0023		J.012	under #1
102	OH5703512	Dayton P.W.S Ottawa PI	Community	3.824	Counted
102	0113703312	Well 029r		J.024	under #1
103	OH5703512	Dayton P.W.S Ottawa PI	Community	3.838	Counted
	0113703312	Well 024r			under #1
104	OH5703512	Dayton P.W.S Ottawa PI	Community	3.859	Counted
	0113703312	Well 0025		<u> </u>	under #1
105	OH5736512	Rip Rap Roadhouse P.W.S.	Non-Community	3.865	100
		Well 0001			
106	OH5703512	Dayton P.W.S Ottawa Pl	Community	3.898	Counted
		Well 0030			under #1
107	OH5703512	Dayton P.W.S Ottawa PI	Community	3.909	Counted
		Well 0040 Dayton P.W.S Ottawa Pl			under #1
108	OH5703512	-	Community	3.933	Counted
		Well 0038 Dayton P.W.S Ottawa Pl		3.955	under #1 Counted
109	OH5703512	Well 0054	Community		
		Dayton P.W.S Ottawa Pl		3.958	under #1 Counted
110	OH5703512	Well 041r	Community		under #1
		Dayton P.W.S Miami Plant			Counted
111	OH5703512	Well 0041	Community	3.976	under #1
		Dayton P.W.S Ottawa Pl			Counted
112	OH5703512	Well 0033	Community	3.998	under #1

Endangered and Threatened Species

MAP ID	LINEAR DISTANCE FROM SITE (MILES)	FEDERAL STATUS*	STATE STATUS*	SCIENTIFIC NAME	COMMON NAME
1	0.968	-	Т	UNIOMERUS TETRALASMUS	PONDHORN

*KEY:

E - Endangered

T - Threatened

LE - Listed Endangered

LT - Listed Threatened

Wetland Data

MAP ID	WETLAND TYPE	LINEAR DISTANCE (MILES)
1	Riverine	0.188
2	Riverine	6.251
3	Freshwater Forested/Shrub Wetland	6.645
4	Freshwater Forested/Shrub Wetland	6.734
5	Riverine	7.452
6	Riverine	7.459
7	Freshwater Emergent Wetland	7.527
8	Freshwater Emergent Wetland	7.565
9	Riverine	7.828

Total Wetland Frontage: 33.813 miles*

^{*} This number is larger than the TDL because it includes both sides of the river, oxbows, former stream channels and/or canals.